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LANGUAGE

AS A MEANS OF

MENTAL CULTURE

AND

INTERNATIONAL COMMUNICATION;

OR

MANUAL OF THE TEACHER AND THE LEARNER OF LANGUAGES.

69584

BY

C. MARCEL, KNT. LEG. HON.:
FRENCH CONSUL.

B 15 9

"L'étude des langues est la première et la plus indispensable de toutes les études."—P. H. SUZANNE.

"Les méthodes sont les maîtres des maîtres."—TALLEYRAND.

IN TWO VOLUMES.

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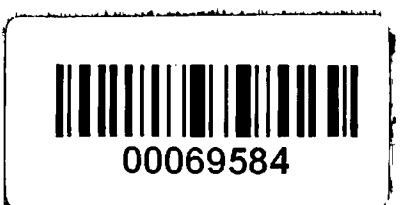

TO

BARON DE MACKAU,

ADMIRAL of FRANCE, &c. &c.

DEAR SIR,

THIS Essay, which I beg to dedicate to you, is the development of the ideas I expressed at your hospitable château of Villepatour, when we were conversing on the best means of educating our children. If it assist in improving the present system of instruction, the greater share of the credit will be due to you; for it owes its existence to your kind and reiterated encouragement.

Education, whose noble office is to aid and direct the free agency of man, could not have a truer patron than the philanthropist, the enlightened minister, who laid the basis of the emancipation of slaves in the French colonies. In all ages, in all climes, for nations as for individuals, ignorance is identified with slavery, and education with liberty.

I have the honour to be,

Dear Sir,

Your devoted and respectful servant,

C. MARCEL.

PRELIMINARY DISCOURSE.

"When Doctrine meets with general approbation,
It is not heresy but reformation."—D. GARRICK.*

LANGUAGE, of all subjects, deserves attention. Its acquisition commences in the cradle; its practical application terminates only in death. On its perfection depends that of all human knowledge. Through it alone can social enjoyment be had and mental acquirement be made. It need not, therefore, excite surprise, that the most eminent writers and philosophers have suggested means for the acquisition of languages.

But, judicious as have been many of the suggestions, their application has not always proved successful; and diversities in method daily increase, because the fundamental principles of the study of languages have not yet been laid down. The process of their acquisition remains, to the present, partial and exclusive.

The greatest obstacle to improvement is the apathy not only of teachers, but of those who ought to feel most interested in the progress of education,—parents and rulers. "Custom," says Rollin, "often exercises over minds a sort of tyranny which keeps them in bondage and hinders the use of reason, which, in these matters, is a surer guide than example, however authorised by time." †

Owing to the baneful influence of traditional routine, the science of education has advanced but slowly: prevalent systems of instruction and popular modes of teaching languages have, with few exceptions, been founded in total disregard of the structure of mind and the wants of society. It is only lately that the true basis of educational science has been recognised to lie in the

* *Epigram to Quin.* † *Traité des Etudes*, Liv. i. c. 3.

constitution of man, his faculties and social relations. We endeavour, in accordance with this progress, to apply the principles of physiology and psychology to intellectual pursuits and, in particular, to the study of language. Entering, therefore, upon our subject with a rapid sketch of the physical, moral, and intellectual organisation of man, we infer the general principles on which a rational method of instruction ought to be founded.

From the natural progress of civilisation the arts and sciences have assumed an importance which they did not possess some centuries back, when classical studies reigned paramount. This fact led us to introduce a general summary of the acquirements which a complete education should comprise, in order to attach to these studies their relative importance, and thereby determine the branches of learning and the departments of language most required at the present day. Until now materials were wanting for this task. It is only in an age like the present, when the highest intelligences have investigated the nature and resources of mind as also the various departments of knowledge, that one could hope, with the aid of these investigations, to bring instruction to a comprehensive and uniform system.

The favourable position in which we are placed by the ent state of educational science, embolldens us to attack the i ine and the prejudices which cramp classical instruction, b as regards the objects and the methods of study. We, consequ tly, in the First Part of this essay, lay down the principles v ich should guide in the teaching and acquiring of languages ; a in the Second, we deduce from these principles precepts and o- cesses which will, we trust, be found both rational and practic e. Recent improvements are combined with what has proved s cessful in long practice; and, throughout, we take for our guide the natural process by which all so unfailingly acquire the native tongue. Thus reason, experience, and nature concur in laying a solid foundation on which the study of languages may rest.

In support of our views, and, particularly, when we contend with long established prejudices, we adduce the authority of those who stand high among the ancient and modern writers. Our opinions, often expressed in the words of celebrated men, are thus confirmed by their experience, and will familiarise our readers with the thoughts of those who have meditated most on education

The important truths which are dispersed throughout their writings being thus collected in one focus, their concentrated rays throw powerful light on the subject.

As in history each successive writer must record the same facts, so, in all didactic composition, the same principles and theories must often be laid down. Hence we occasionally express ideas which occurred to us as they had occurred to others, or which we gleaned in reading, without precisely recollecting to what authors they belong. We give, in an Appendix, a list of the various works we have read on the study of languages, that our readers may ascertain the extent of these accidental coincidences, or gleanings, as the case may be, and the degree of originality which characterises our work. This list will also be of service to those who wish to study the subject and compare different systems. *

In combining great established truths with the results of our own experience, we follow the example of all who have advanced science. There is not a standard work in any branch of knowledge which is not, in great part, founded on what is best in previous works on the same subject. Were it otherwise, it would be impossible to bring science or art to perfection; the longest life would not suffice to master even one department of knowledge, if all ideas relating to it could be found only in the works of their respective originators.

Though we draw from all sources, we hope our method will not, on that account, be depreciated. Machinery is perfected and codes of laws are framed by successive improvements and by accumulated efforts of many individuals; so, in education, a method, to be complete, must be eclectic. "Of all systems," says Baron Degérando, "the most solid and the truest is that which, without altogether excluding any, recognises what is useful in all and wisely combines them." † What Mr. Cousin affirms of the true greatness of a people may be said of a right method: "It does not consist in borrowing nothing from others, but in borrowing from all whatever is good, and in improving whatever it appropriates." ‡ In another place this great philosopher says, "No

* For those of our readers who cannot have access to these works, we subjoin some extracts which bear on our subject, and are too long to be introduced as quotations in the text. The references to these extracts will be indicated by figures.

† *Du Perfectionnement Moral.*

‡ *Leçons de Philosophie à l'Ecole Normale.*

one system contains itself all the truth; it can be found entire only in all." *

While we hope we shall not be found destitute of originality, we must say, utility rather than novelty has been our aim:—next to the merit of discovery is that of its practical application. We endeavour to ameliorate what exists rather than to hazard new theories; we especially arrange, demonstrate, and bring into operation many scattered truths which, until now, have remained in a state of conjecture.

Lavoisier did not invent chemistry; but his classifications have thrown light on the investigations of his predecessors and raised their discoveries into a beautiful science. Through these classifications chemistry has rapidly advanced. Classification is also our object. We shall rest satisfied if we throw some light on the important branch of education which is the subject of the following pages, and if, by taking some steps in its progressive amelioration, we prepare the way for its future perfection.

The investigations to which our subdivision gives rise enable us to examine every means of improvement which a good method should afford. Special directions are given for the acquisition of the native and a foreign language—ancient or modern; whether the learner be a child or an adult, a beginner or a proficient; whether he learn with or without a teacher, in private or in a public school. And, without encroaching on the time required for scientific pursuits, linguistic studies are made instrumental to the acquisition of knowledge and improvement in the native tongue, as well as to the intellectual culture and international communication, — all indispensable requirements in modern society.

CORK, *Jan.* 1, 1853.

* *De l'Instruction publique en Allemagne*, Preface to 3rd edit.

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ERRATA.

Page 29, line 15, *read* "Richornnd" *for* "Richoraud."
„ 237, heading, *read* "exorcise" *for* "exercises."
„ 306, last line, *read* "pupils" *for* "pupil."
„ 352, line 38, *omit* "usual."
„ 387, heading of Ch„ *read* "Inefficiency" *for* "Insufficiency."

PART THE FIRST.

OF LANGUAGE,

AS A BRANCH OF EDUCATION.

"L'étude des langues est la première et la plus indispensable de toutes les études."
P. H. Suzanne

BOOK I.

OF EDUCATION IN GENERAL.

"La vie de l'homme n'est en réalité qu'une grande éducation dont le perfectionnement est le but."—J. M. Degérando.*

"We regard education as the formation of the character, physical, intellectual, and moral; as the process by which our faculties are developed, cultivated, and directed, and by which we are prepared for our station and employment."

W. C. Woodbridge.†

INTRODUCTION.

Sect. I.—DEFINITION OF EDUCATION.

Education is the first want of society. It is the only safe basis on which can be firmly established the observance of the laws, the happiness of individuals, the prosperity of a nation, and the progress of civilisation. "Of all great objects of national policy, which can engage the attention of subject or ruler," says the untiring and eloquent advocate of national education in Ireland, "this is, by far, the greatest;—great now, great at all times; not a helper only in the building up of society and of civilisation, but the only foundation on which all society and civilisation must finally rest. He who neglects this, may construct what social edifice he pleases; he will soon find, to his cost, that he has been but an architect of ruins."‡ "I always thought," says also Leibnitz, "that mankind could be reformed by reforming education."§ So powerful, indeed, is the influence of education, that he, who should have it in his own hands, could change the face of the world.

Education proposes to confer on man the highest improvement

* *Du Perfectionnement Moral.* † *American Annals of Education.*
‡ *Thomas Wyse. Speech in the House of Commons, May* 19, 1835.
§ *Letter to Placcius.*

of which his *body*, his *mind*, and his *soul** are capable, with a view to secure his well-being, to fit him for society, and to prepare him for a better world. Hence, general education is divided into three branches, *Physical*, *Intellectual*, and *Moral*, the latter including Religious training. The first aims at *health*, *strength*, *and beauty;* the second at *mental power and the acquisition of knowledge;* and the third at *piety*, *justice*, *goodness*, *and wisdom*.

These acquirements, carried to their highest degree of perfection, bear analogy with the attributes of the Divinity, of whom man is a feeble image; and it is only by constantly endeavouring to possess them that he can really be said to assimilate himself to his Maker. He cannot, it is true, reach perfection; but his efforts ought always to tend towards it. "Be ye therefore perfect, even as your father which is in heaven is perfect."† The hope which arises from the consciousness of man's progressive improvement, points to happiness as his pursuit and to immortality as his destiny. The perfectibility of human nature and the progressiveness of truth will be placed beyond doubt when education is properly understood.

By perfectibility we mean not the power of reaching perfection, but the capability of always advancing towards it. This capability, consistent with the design of a bountiful Creator, is the foundation of human happiness. Man has been created to be happy: his desires and the numberless means of enjoyment which God has placed at his disposal, within him and without, sufficiently prove this truth. His happiness is the better secured in proportion as his physical, moral, and intellectual constitution approaches nearer to perfection; for he will, in the same pro-

* We have, consistently with common practice, adopted this subdivision, because it facilitates the classification of the various objects of education; but the terms, *soul* and *mind*, require to be explained; for they are often confounded one with the other, and are understood differently by different people. We therefore think it right to state the meaning which we attach to them in this place.

Man is a compound of *spirit* and *matter*, called *soul* and *body*. *Mind* does not constitute a third essence; the idea expressed by this word is included in that which is conveyed by the word *soul;* in fact, *mind* is a specific term, and *soul* a generic one. *Mind*, synonymous with *understanding*, comprises the faculties which have their sphere of action in the *brain*, and which operate on ideas; hence, the Philosophy of the Mind is sometimes called "Ideology." *Soul*, in its general acceptation, embraces all the spiritual nature of man, moral and intellectual; and the science which treats of it in this wide sense is called "Psychology." But used as it is here, in a restricted sense and in contradistinction to *mind*, it implies only his higher attributes, the moral faculties, the directing powers, all the inclinations and emotions which are figuratively said to have their seat in the *heart*. The *soul* and its attributes, viewed in this light, form the subject of Ethics, or Moral Philosophy.

† *St. Matthew, Gospel*, ch. v. 48.

portion, possess greater means of physical, moral, and mental enjoyment. True happiness and perfection are inseparable. Such is the law of our nature, that, to arrive at happiness, we must advance towards perfection.

Civilisation, which originates in the principle of perfectibility unfolded by education and society, marks the progress of man towards the highest improvement which his constitution is intended to reach, and places within his power all the resources which external nature has in store for his well-being. Barbarism, which has been improperly called the natural condition of humanity, is only a state of retrogression: the first man was not created a savage. Civilisation is alone the true natural state of man, as being that towards which all his energies instinctively tend, and in which all his faculties are brought into activity. It arises from sociability, one of the principles of his nature. "Humanity is endowed with capacities which can be perfected only by the combination of minds; there is a life running through the whole mass, which, in the isolated individual, is entirely lost; there is a divine plan in human history, which shows that all minds are closely linked together in the chain of being; in brief, there is a purpose, a destiny, an end which can be accomplished only by humanity as a whole—by time, and by united labour." (J. D. Morell, *Philosoph. Tendencies of the Age.*)

SECT. II.—EXERCISE OF THE FACULTIES—THE BASIS OF EDUCATION.

To effect the gradual perfectibility which can best promote man's well-being and secure the various acquirements which constitute his highest improvement, God has given him—in addition to the instinctive impulses which he possesses in common with the other animals—physical, moral, and intellectual faculties, or innate powers of action, susceptible of being improved, and which it is his duty, as well as his interest, to cultivate within rational limits. He is the more prompted to exercise these faculties, the essential elements of his constitution, as their very action is a source of pleasure to him,—a pleasure which increases, as they are invigorated by exercise. A want thereby arises, the satisfying of which calls for their constant activity. Thus has the Creator provided for their exercise, and pointed out to us the path we should follow.

Freedom is indispensable to man's perfectibility; he has, in consequence, been created a free agent, and he claims from society, as his imprescriptible right, that liberty of thought, of speech, and

of action, without which he could not cultivate and completely unfold all his faculties. So deeply implanted is the innate sense of this right, that ages of oppression and slavery have been unable to root it out of the human heart. Consistently with his original freedom, he has been endowed with the privilege of exerting over his faculties a voluntary control, by which he can modify, regulate, and perfect them: thus he becomes the subject of culture and discipline. Different from the animal tribes, which reach the perfection of their being, not by gradual development, but at once and without the aid of education, he is a progressive creature; his powers are unfolded, and his acquisitions made only through a process of slow and careful training. He has to learn everything, while they instinctively possess all the knowledge which they want. Education is the law of his nature, as uncontrollable and limited instinct is that of the brute.

Some animals, it is true, are found susceptible of a certain degree of education; but this exception, limited as it is, does not invalidate the general law of the immutability of the brute creation. Besides, the education which these animals receive from man is not required by them; it does not add to their well-being; it does not enable them to provide for their own wants better than other animals of their own species; it begins and ends with the individuals, without being in the least profitable to them or to their offspring.

All the acquirements which contribute towards human perfection, arise from a proper cultivation of the faculties. Exercise is the source of that cultivation; it is the vital principle of education. Exercise affects the original powers of man's constitution in two ways: it imparts to them energy in proportion to its quantity, and generates peculiar qualities, aptitudes, or capacities, consistently with its particular nature. But, in the application of this great principle, excess and exclusiveness must be avoided. An excessive or exclusive exercise of any faculty would be as prejudicial as its utter neglect. It is the preponderating activity of some one faculty to the exclusion of the others, or the over-indulgence in one particular mode of its action, which produces those inconsistencies of character, those aberrations of mind, often observed in men. Although the innate powers are few in number, the qualities, aptitudes, and capacities to which their varied exercise and their different degrees of native activity give rise, are so numerous, so diversified, and so opposite in their kind, that man may be the noblest, or the most contemptible being of the creation, according as they are properly or improperly directed

and exercised. Hence, although his organisation is universal and invariable, his physical, moral, and intellectual character, which depends on the qualities acquired, varies with time, place, and the progress of civilisation.

The faculties have all their legitimate spheres of usefulness, and the benefits to be derived from each depend on their harmonious development. They are, in fact, different instruments, all of which are indispensable for attaining man's possible perfection; and, as such, they require to be duly improved and properly applied, to secure the ends for which he was placed on this earth. Although connected by secret ties, the faculties are yet so independent of each other, that each demands special and distinct exercises for its due cultivation. It is the noble office of education to direct their natural activity, to extend and multiply their various energies, as also to indicate the means by which they may best perform their work, and by which they are made subservient to happiness. Education may, in fact, be said to have for its object the securing of happiness through the perfection of all the faculties. The study of the three species of faculties—the physical, the moral, and the intellectual—and the investigation of their relations to external nature, have given rise to the three systems of philosophy which are respectively based on sensation, sentiment, and reason, and which, under the name of Eclectic Philosophy, M. Cousin has combined in so admirable a manner.

If our pursuit after happiness always proves vain, it is because the innate powers on the harmonious development and good direction of which it depends, have, many of them, opposite tendencies; and, consequently, their collective perfection can never be accomplished, even with our best endeavours. The highest state of happiness is reserved for a better world—for a world in which perfection does exist.

SECT. III.—SUCCESSIVE DEVELOPMENT OF THE FACULTIES.

In order to advance towards the three-fold perfection, education should take under her guidance the faculties of man, as they gradually dawn, with a view to aid their spontaneous action, and improve them by proper cultivation. At the moment of birth, the faculties are in complete torpor. The physical faculties are the first which manifest themselves, because they are indispensable to our existence; next appear the moral faculties to direct the organs of sensation, and to secure the well-being of the individual. The intellectual powers are usually the last to be in full

activity. Thus, nature indicates the order to be followed in the successive cultivation of these different classes of faculties, until the general manifestation of them all permits their simultaneous training. The principle of slow progression runs through all that is created to grow and improve. Gradation is an invariable law of nature; and it is in conforming to that law that the great art of education consists.

In aiming at the complete development of all the primitive powers of the child, the educator should observe, as nearly as he can, the order of nature. However, it is difficult to determine in a definite manner the order in which all the faculties should be brought under the control of discipline; for, our constitutions and characters being infinitely diversified, as are also the circumstances in which we are placed, the same means and principles of action cannot always be used with the same effect. But, whatever be the order followed in the cultivation of the faculties, the important point is gradually to bring the cultivation of each in unison with that of the others. In endeavouring to attain this harmonious development, the educator should avail himself of the intimate connexion and mutual relation which exist between them all, and which render the exercise of each subservient to the cultivation of all. The affinity which thus brings the three classes of faculties into immediate contact is one of the many manifestations of that admirable unity which marks all the works of the Almighty. *

Precedence, however, should be given to physical and moral training over intellectual pursuits, because the physical and the moral faculties provide for our first wants as living beings and as members of society. Their proper direction is useful under any circumstances, should even mental culture be entirely neglected. The latter, on the contrary, would be useless in the absence of health, and might be pernicious in the absence of morality. The worth of man is in proportion to his morality rather than to his intellectuality.

The proper development of the moral faculties is the safest foundation for the most extensive state of liberty in man; for their general activity and their good direction give him the right to gratify all his desires, which, under their benign influence, can only be virtuous and rational.

* These three classes of faculties are considered by German philosophers as the three branches of one science, and are treated as such, under the name of *Anthropology* (science of man).

SECT. IV.—OF HABIT.

No time will be lost, no effort will be fruitless, if each step is made sure as the child advances through the educational course. This can be effected only by the continual repetition of the exercises on which depend the energy of the faculties and the acquirements proposed by education. The more frequently any action is repeated the more easily and rapidly is it executed; on the other hand, ease and rapidity of execution tend to make it less perceived, more independent of the will, and, thereby, longer persevered in. Such an action is said to be *a habit*. All physical, moral, and intellectual operations are liable to become habits.

These habits produce in us permanent and, as it were, instinctive dispositions which constitute a new mode of existence; hence they have been called "second nature." The acquisitions made through any of the faculties being rendered habitual by repeated exercise, adhere so tenaciously to our individuality, and are, in every respect, so closely assimilated with the elements of our native constitutions, that it is, in many instances, impossible to distinguish the acquired from the innate dispositions.

Habits promote or impede our progress, according as they are good or bad. Good habits extend the power of our faculties and facilitate our improvement, because the readiness and spontaneity with which habitual ideas are recalled and habitual actions are performed, permit these faculties to apply their activity to new acquisitions, and these ideas or actions to be brought in aid of further improvement. Bad habits are obstacles to improvement, because, escaping attention as they do, the will has little control over them: it must therefore be difficult to guard against their intrusion, or avoid their evil influence. Habit changes good actions into virtues and faults into vices; it enables us to add new to old acquisitions, and gives stability to all physical, moral, and intellectual acquirements. The chief business of education may be said to consist in forming good habits and preventing bad ones. Solomon declared the power of habit when he said, "Train up a child in the way he should go; and when he is old, he will not depart from it." It is by the admirable law of habit that man, although possessing very limited powers, can indefinitely extend his acquisitions and advance towards perfection.

Dr. A. Combe has so clearly shown the effects of repetition

and the advantage of habit as applied to study, that we cannot forbear quoting him at some length.

"If we repeat," he says, "any kind of mental effort, every day at the same hour, we, at last, find ourselves entering upon it without premeditation, when the time approaches; and, in like manner, if we arrange our studies in accordance with this law, and take up each regularly in the same order, a natural aptitude is soon produced, which renders application more easy than by taking up the subjects as accident may direct. Nay, the tendency to periodical and associated activity occasionally becomes so great in the course of time, that the faculties seem to go through their operations almost without being conscious of effort, while their facility of action becomes so prodigiously increased, as to give unerring certainty where, at first, great difficulty was experienced.

"The necessity of judicious *repetition* in mental and moral education is, in fact, too little adverted to, because the principle on which it is effectual has not been understood. To induce facility of action in the organs of the mind, *practice* is as essential as it is in the organs of motion. Repetition is necessary to make a durable impression on the brain; and, according to this principle, it follows, that in learning a language, or science, six successive months of application will be more effectual in fixing it in the mind and making it a part of its furniture, than double or triple the time, if the lessons are interrupted by long intervals. Hence, it is a great error to begin any study and then break off to finish at a later period. The *ennui* is thus doubled, and the success greatly diminished. The best way is to begin at the proper age, and to persevere till the end is attained. This accustoms the mind to sound exertion and not to fits of attention. Hence, the mischief of long vacations, and hence the evil of beginning studies before the age at which they can be understood, as in teaching the abstract rules of grammar to children, to succeed in which implies in them a power of thinking and an amount of general knowledge, which they cannot possess." *

* *Elements of Physiology.*

SECT. V.—THE FOUR EDUCATIONAL PERIODS OF YOUTH.

Youth is the season of life designed by Providence for giving a proper direction to the faculties, for training the habits and laying the foundation of the physical, moral, and mental character. It may be divided into four periods, through which are distributed the various exercises indispensable to a good education, and to which we shall often have occasion to allude. These four periods are,

1. From birth to the age of 6 (*Infancy*).
2. From 6 to 12 years old (*Childhood*).
3. From 12 to 16 years old (*Adolescence*).
4. From 16 to 21 years old (*Puberty*).

It must be well understood that this classification is only approximate; for the natural activity of the faculties is found to vary considerably throughout the different periods of youth. It is not unusual to see, for example, a child of eight years more advanced in physical or mental growth, than one of ten or even twelve.

We must, however, observe that education does not end with youth: it continues through the entire of our earthly existence. The discipline to which man is subjected during these four periods, and especially during the first three, ought to be considered only as a preparation for the great education of life; its primary object is to enable him to improve himself afterwards, and to adapt himself to the particular circumstances in which it shall please Providence to place him.

The threefold process which transforms the most helpless being into the noblest work of God on earth, is too vast in its details to permit us to do justice to the subject in the present initiatory Book: we will only briefly indicate what are, in the three departments of education, the faculties to be trained and the acquisitions to be made through their instrumentality. Our observations on these points are not offered as a treatise on education; they are merely intended to exhibit the fundamental principles of the science of Education, from which are deduced our precepts, and on which should be based the study and the teaching of languages. No system of instruction, in fact, can be safe or successful, which has not its foundation in a thorough knowledge of the constitution of man, and which is not formed with due regard to the end proposed in education.

CHAPTER I.

PHYSICAL EDUCATION.

SECT. I.—DEFINITION.

THE objects of physical education are the preservation of health, the cultivation of the physical faculties, and the acquisition of useful arts and accomplishments.

Physical Perfection may be said to consist in *bodily strength* and *beauty*, which are the offspring of a healthy constitution, and of well-developed organs.

SECT. II.—THE ORGANS AND FUNCTIONS OF ORGANIC LIFE.

The physical constitution of animals is invariably formed according to the instincts and kind of intelligence with which each species is endowed: that of man is divided into two systems which, although distinct, have a mutual dependence on each other; these are the *organic* and the *animal*.

The organic system, or vegetative life, has for its principal organs, *the heart, the stomach*, and *the lungs*. Their functions, independent of the will, are confined to the preservation of health, the support of life, and the growth of the individual.

The functions of organic life being involuntary, come only indirectly within the power of education: as health and life depend on them, the Creator has not permitted that they should be under the immediate control of our caprice; they are as active in infancy as in the maturity of life. Physiology makes us acquainted with the natural laws which govern these functions; and it is our interest to conform to them; for, as long as man acts in accordance with the dictates of nature, in the gratification of his wants and appetites, she provides for the regularity and energy of the vital faculties.

The child generally comes into the world in a healthy condition; it is the duty of the educator, whether a parent or his substitute, to preserve him so. This will be more particularly

effected by a close attention to *diet, sleep, cleanliness, clothing, air*, and *exercise*, which have a direct influence on the organs of life. The manner in which these first wants of nature should be supplied is an essential part of physical education.

Hygiene prescribes for this object rules, which are but too often neglected. It would be impossible to state the extent of injury done to humanity by the almost universal ignorance of this important branch of the medical science. The benefits of health are not confined to the individual; they extend to the community and to the future generation. The child will be a parent; and on the constitution of the parent depends, in a great measure, the constitution of the future child: man follows, in this respect, the laws of animal nature.

SECT. III.—RECIPROCAL DEPENDENCE OF MIND AND BODY.

By reason of the intimate relations which exist between all the parts of the animal economy, the judicious exercise of the physical faculties which obey the will, cannot fail to exert a favourable influence on those which are not subject to it. Not only do pure air, proper food, muscular exercise, and cleanliness of the skin, stimulate and improve the circulation of the blood, the digestion and the respiration; but moral feelings and intellectual occupations have, through the nervous communication existing between the brain and the three vital organs, a direct influence on their functions. A well-regulated activity of the mind, and cheerfulness of disposition, are essential to sound bodily health, whilst excess of intellectual labour, and violence of moral emotions are among the many causes of physical derangement.

On the other hand, the state of the circulatory, digestive, and respiratory organs, has a direct influence not only on physical education, but on moral and intellectual training. Health is the foundation of the whole edifice of education. The mind is incapable of exerting all its energies and the heart its kindliest affections, if the body is in a state of debility or disease.

The connection between the body and the mind, and their reciprocal dependence on each other, as established by physiology and psychology, must never be lost sight of. As the physical organs are the instruments which the soul employs in its operations, their soundness and activity must facilitate its discipline. Physical education cannot, therefore, be separated from moral and intellectual training.

Physiology affords aid in psychological investigations. An

educator must understand the animal economy of man, in order to study with advantage his higher faculties. Whatever he attempts to teach, from the first elements of knowledge to the higher truths of science, his success will depend, in a great measure, on his acquaintance with the functions of the human frame, and on the extent to which he acts in obedience to the laws of physiology. The mental and the moral powers with which the child is endowed, manifest themselves through the medium of organisation, and no plan which he can devise will be successful for their cultivation, that is not in harmony with the laws which regulate that organisation.

"I cannot," says Dr. A. Combe, from whom we borrow the last observation, "I cannot regard any teacher, or parent, as fully and conscientiously qualified for his duties, unless he has made himself acquainted with the nature and general laws of the animal economy, and with the direct relation in which these stand to the principles of education." * "Instructors of youth and authors of books for children," says also Dr. Brigham, "would do well to acquaint themselves with human anatomy and physiology, before they undertake to cultivate and discipline the mind." † The celebrated Galen was so convinced of the influence of the physical nature of man over his moral and mental constitution, that he invited the educators of his time to send him the children whose hearts and minds were vitiated, promising to improve them by purely hygienic means. Descartes also declares, that, if mankind can be improved, it is in the medical science that we must seek the means of doing so. ‡

SECT. IV.—THE ORGANS AND FACULTIES OF ANIMAL LIFE.

The animal system is composed of several organs, the seats of corresponding faculties; it presides over functions which are intended to supply the demands of reason, and are, consequently, subservient to the commands of the will. The cultivation of these physical faculties is next in importance to the preservation of health. Their development is proportionate to the quantity, and analogous to the nature of the exercise to which the respective organs, their instruments of action, are subjected in the pursuit of the arts and accomplishments which constitute physical acquirements.

* *Elements of Physiology.*
† *On the Influence of Mental Cultivation, &c., on Health.*
‡ *De la Méthode.*

We subjoin here the organs, or groups of organs, of this system, with their corresponding faculties, and the qualities which this branch of education proposes to cultivate in these faculties.

	Organs to be exercised.	*Faculties to be developed.*	*Qualities to be cultivated.*
Sensitive organs.	Brain	Consciousness, &c.	Power, activity, correctness, acuteness.
	Eye	Sight	" " " "
	Ear	Hearing	" " " "
	Fingers and cutaneous surface	Feeling	" " " "
	Palate, tongue	Tasting	" " " "
	Olfactory nerves	Smelling	" " " "
Vocal organs.	Larynx, lungs	Voice	Clearness, fulness, extension, force.
	Tongue, lips, &c.	Articulation	Softness, sonorousness.
			Clearness, distinctness, flexibility, facility.
Muscular and locomotive organs.	Muscles	Muscular Action	Activity, flexibility, strength.
	Bones, limbs	Motion	Activity, flexibility, strength, agility.
			Dexterity, ease, grace.

1. *The Brain.*

The Brain, the principal and central organ of animal life, is, under the direction of the mind, the mover of the voluntary organs, and the focus towards which all the sensitive faculties converge. This double function is effected by means of the nervous system, which has its origin in the brain and spinal marrow. The nerves distribute sensibility and life through the whole physical organisation; some convey to the brain the sensations which the organs of sense receive from the external world, whilst others obey its determinations, by bringing into action the vocal, the muscular, and the locomotive organs. The brain may perhaps be considered rather as a system of organs, than as a single organ; but, in whatever light it be viewed, its entire development is the necessary consequence of the activity given to all the faculties, and particularly to the sensitive organs. Like the other organs, it increases or diminishes in power, as it is exercised or not exercised; it is enfeebled by inaction, and injured by over-activity.

This complex organ, the mysterious link which unites the physical with the mental nature of man, is the seat of consciousness

feeling, and thought, and the medium through which the mental faculties are manifested. How the connection between the brain and the operations of the mind exists is as yet a mystery; but modern physiology has, by induction, sufficiently established the fact, to place it beyond doubt; and it may unhesitatingly be affirmed, that the action of the mind is commensurate with the activity of the brain: its functions are in strict obedience to the laws which regulate this organ.

The proper exercise and the consequent healthy condition of this wonderful organ ought to be carefully attended to, since intellectual improvement greatly depends on its activity and soundness. Good digestion might as well be expected from a diseased stomach as a sound intellect from a disordered brain. In the first period of youth the brain, being extremely delicate and but partially developed, is not yet ready for the important office which it is intended to perform; an undue excitement of the intellectual powers, at this time, would be productive of the most pernicious effects on this organ, and, by a corresponding excitement of the nerves, on the whole animal economy.

The exercises to which the brain is subjected affect the physical as well as the spiritual elements of our constitution; for this organ not only communicates all its impressions to the soul, but, by a most admirable reaction, produces on the muscles of the body, and particularly on those of the face, infinite modifications which correspond to those impressions, and which are the external marks of their existence. It originates those movements of the limbs and attitudes of the whole figure, that paleness and blush, those frowns and smiles, those tears and bursts of laughter, those sighs, groans, sobs, and cries, all those changes of the countenance and inflections of the voice which are the natural signs of the desires, emotions, and thoughts within. Spirit and matter are so closely united in man, that every motion of the physical organs is a manifestation of the soul which animates them. These signs, the collection of which has been called *the language of action*, are the innate elements of communication amongst men; for not only do particular desires, emotions, and thoughts excite corresponding external expressions, but no sooner are these expressions assumed in one individual, than, by the effect of sympathy, the concomitant feelings arise in the minds of the beholders; thus proving that man was destined to be a communicative and a social creature.

The accidental and variable states of the soul are not alone expressed by the external appearances of the body; its propensities and inclinations are also indicated by an habitual deportment and a fixed expression of countenance. Moral and mental habits produce in the whole person, and especially in the external muscles of the face, corresponding modifications which become permanent, and which faithfully represent them. On this truth, which is universally known, the painter, the sculptor, and the poet have founded the most exquisite productions of their arts. The habit of low thought and degrading inclination vilifies the features, and that of thoughtlessness and ignorance stupifies them; but the ugliness which proceeds from vice is the most shocking of all; while virtue diffuses an unspeakable charm over the features, and intellect beams in the eye of its gifted possessor. What object is more lovely than the serene and bright countenance which bespeaks uprightness and benevolence, intellect and wisdom? This is the physical beauty to which every human being may aspire, and which a proper moral and intellectual education can bestow.

2. *The Sensitive Organs.*

Seeing, hearing, feeling, tasting, and smelling, the faculties of sensation, are the mediums through which the mind and the material world act upon each other. By the intervention of the nerves, they receive from external objects, and communicate to the brain all the perceptions which come under the cognisance of the mind; they give the first stimulus by which the mental powers are roused into action. These instruments of sensation need exercise, in order to reach their utmost accuracy and energy. The degree of excellence to which some of their qualities are brought by practice may be seen in the blind and the deaf —whose healthy organs are usually much exercised, and consequently very acute and accurate—as also in eminent painters and musicians, who attain a remarkable delicacy and correctness of the organ engaged in their respective arts. The Indian, whose ear is cultivated as a means of pursuing his prey or avoiding danger, hears sounds which are inaudible to a European. How keen the sight of a seaman, how delicate the sense of taste in a wine-taster, how exquisite the touch of those whose employment requires them to examine the texture or the polish of bodies!

The exercise of the senses is essential as a means of intellectual education; for primary ideas can be received only through their medium: our sensations are, in fact, the origin of our knowledge. The more the senses are cultivated, the more clear, just, and lasting are the impressions which they convey to the mind. This cultivation must, however, be effected within rational limits: man was not intended to vie with certain animals in the acuteness of physical organs; and, although education might enable him to compete with them in this respect, he ought not to aim at an organic superiority which could be attained only to the injury of higher faculties, and to the prejudice of the general improvement of all his being. The collective development of the external senses will enable them mutually to aid each other, by corroborating or correcting the impressions received by each. Nevertheless, the senses of touch, hearing, and sight call for a greater share of attention, as being the great inlets of knowledge, and having a more intimate connection with the mind than the other two.

The sense of touch, more delicate in man than in animals, differs from the other sensitive faculties, inasmuch as its function is voluntary, and implies some degree of reflection in the being who exercises it. The eagerness with which infants lay hold of every object within their reach, is the first indication of their reason; and, consequently, it should be encouraged. This sense assumes an active part in intuitive instruction; for it takes cognisance of a very considerable number of properties in external nature.

The faculty of hearing acquires a high degree of importance from its awakening and directing the functions of the vocal organs: correct pronunciation and accurate singing depend not so much on the voice as on the ear. This organ is valuable, also, as being the medium through which language is acquired, the mind enriched with information, and the soul gratified with the pleasing sensations arising from melody.

But, of all the physical senses, the most valuable is the sight. An infinite variety of sensations and ideas are received through this sense alone; and not only do they embrace a larger range of objects, but the impressions which they make on the brain are more vivid and more easily recalled than those which are received through the other organs. The visual action continues the longest without fatigue, and brings within the cognisance of the mind the most distant and the most sublime parts of the

Creation; it supplies the judgment with the most abundant premises, and the imagination with the most diversified and most pleasing images.

Great differences exist between the primitive constitutions of the same organs in different individuals. The eye which clearly perceives forms and proportions, is often naturally deficient in seeing minute or distant objects, or distinguishing shades of colour, and *vice versâ*. The ear which is the most acute in hearing faint or distant sounds, frequently cannot appreciate the elements of melody, nor accurately distinguish the articulate sounds of foreign languages; nor are these two qualities of hearing always found together in the same individual. It is the duty of the educator to observe these differences, and exercise what is weak, or check what is over-active in the mode of action of each organ, when its natural condition is inconsistent with the future vocation of the child.

Every means should be resorted to for the complete development of these senses. It is by varying the objects of perception that they are cultivated in all their diversities, and that the mind is, through their means, stored with varied intuitive knowledge. We shall indicate in Book IV., the manner of exercising them in connection with the intellectual powers.

3. *The Vocal Organs.*

The vocal apparatus is composed of a numerous assemblage of organs which concur in the formation and modification of the voice, as it is heard in cries, in articulate language, and in singing. The mechanism of this wonderful apparatus, although simple in appearance, has not yet been completely accounted for by physiologists. It is composed of two classes of organs, each filling a distinct office: these are the lower or vibrating organs, and the upper or articulated organs. The lower organs—of which the principal are the larynx and glottis, with their muscles, cartilages, and ligaments—render sonorous the air expelled from the lungs, and thus produce the voice with its intonations and modulations, its loudness and pitch. The upper organs, namely, the throat, nasal fossæ, palate, tongue, teeth, and lips, have a double function: by the diversity of forms which the various relative positions they assume give to the oral cavity, they engender a corresponding diversity of sounds; and, by their motion, they modify the sonorous air, as it passes through the mouth and nasal fossæ, and thus produce a great variety of vocal

articulations. The lower organs are the organs of voice, and the upper, the organs of speech.

The vocal organs offer the readiest and most effective means of communication amongst mankind, and as such, assume a high degree of importance; for the exchange of thought is an essential element of our perfectibility. The Creator, who has destined man to live in society, has furnished him with these instruments of expression, and bestowed on him, at the same time, an instinctive desire to use them, by making him communicative. He, moreover, has given him the means of doing so, by creating him an imitative and intellectual being; by submitting the action of his vocal powers to the government of the ear and to the determination of the will; as also by providing him with model sounds in the various noises produced by natural objects; in the cries of animals, and in the vocal sounds which he utters as the natural signs of his emotions. The vocal organs obey the social inclinations and intellectual powers which create, select, and combine the words before the organic action gives utterance to them. Thus, speech, arising spontaneously from the natural operation of the faculties, may truly be regarded as of divine inspiration.

The muscles which subserve the purposes of respiration, voice, and articulation, sufficiently demonstrate, by their action and their wonderful adaptation to the properties of the atmosphere, that they were intended to fulfil the office of oral communication in aid of the language of action. The very conformation of the mouth and flexibility of the tongue are the fittest that could be conceived for the modification of sounds and articulations. The spontaneous utterance of certain exclamatory syllables, which often accompanies perceptions and emotions, further proves the natural relation between the inward feelings and the vocal powers. This wise provision of a bountiful Providence becomes particularly obvious, when we contemplate the admirable relations which exist between the vocal and the auditory organs. The voice and the ear seem, indeed, to have been made the one for the other. There is not an articulate sound perceived by the ear which the voice cannot imitate; whilst, on the other hand, the ear can appreciate the slightest shades of intonation in the human voice. When we consider the wonderful functions of the vocal apparatus, its close affinity with the sense of hearing, the variety of its sounds, articulations, and intonations, and all the purposes which it accomplishes for the improvement and well-being of the human race, we know not whether to

admire most, the simplicity or the efficiency of the means which the infinitely-wise Creator employs for the attainment of His ends.

Man, under the influence of the mental dispositions with which he has been endowed, in perfect adaptation to his physical constitution, has only used his privilege, as a perfectible being, in modifying and extending by analogy his natural powers of expression: according as the necessities of his social relations required, he instinctively and gradually transformed his simple exclamations into conventional signs expressive of his ideas and feelings. His intellectual organisation equally proves the intention of his Maker in this respect; for, if it be admitted that he always thought, it must also be granted that, as a social and communicative being, he always wished to speak. The faculty of thinking is so closely connected with that of communicating thoughts, that one can hardly be conceived separate from the other.

So powerfully is man prompted by his nature to use his vocal powers for the communication of thought, that no tribe has yet been known, however few in number, however rude in condition, who did not possess an articulate language adapted to all the purposes and wants of their particular mode of life. The faculty of speech is, indeed, an essential attribute and one of the most remarkable characteristics of the human constitution: hence the justness of the epithet μεροψ (articulate speaking) given to man by Homer.

The peculiar conformation of the vocal organs in almost all the lower animals, shows that they are not intended to perform the same functions as those of man. Some species among the brute creation can produce a few vocal sounds and articulations; but none are enabled to form them all, being destitute of the powers of imitation, analogy, and will, by which, as shall subsequently be shown, the elements of the articulate language are determined. This inferiority of organisation, which is an obstacle to their possessing a regular language (for we cannot give to their cries the name of language), coincides with another circumstance of their physical constitution, in proving that they were not intended by nature to be communicative: their features do not exhibit that ever-changing expression of countenance which characterises the human face; they, with rare exception, neither shed tears, laugh, nor gesticulate; in a word, they give no external indication of inward thoughts. Their physical condition is consistent with their want of the moral and mental

faculties which constitute the basis of social intercourse. They seldom sympathise with their fellows, and never feel curiosity to inquire into their concerns. They do not reflect, because they do not possess the moral power, the will, by which attention is directed to the impressions made on the brain: taking no notice of those impressions, or ideas, they retain no consciousness of them; and the evanescence of the ideas precluding the possibility of their communication, no language is consequently needed.

Most of the lower animals have a voice in common with us, and, in their cries, instinctively produce inarticulate sounds; but articulate language, or speech, is the privilege of man; and the vocal organs, by which it is effected, must be cultivated: for, although their flexibility and the consequent distinctness of the articulations, as well as the clearness and the power of the voice greatly depend on their favourable conformation; nevertheless education may, to a great extent, contribute to these qualities, or remedy natural defects. The exercises which call them into activity must not be neglected, as the proper cultivation of the vocal powers contributes its share to the perfect harmony of all the physical faculties.

As branches of physical education, oral reading, recitation, and singing may be had recourse to, either to cultivate the hearing and the vocal faculty, or to strengthen the lungs and chest. In French and in Italian, these exercises would admirably answer this purpose, because the fulness of the sounds and the great compass of the notes would, if loudly uttered, give melody and extension to the voice, as well as elasticity and expansion to the lungs. A judicious exercise of these organs contributes, more than people are generally aware, to a healthy state of the constitution. "Reading aloud," says Dr. A. Combe, "is extremely useful in developing and giving tone to the organs of respiration, and to the general system."* Pliny recommends it as a means of facilitating digestion and improving the chest.

The celebrated Cuvier often declared that he was certain he would have fallen a victim to consumption, had he not had the good fortune to be appointed to a professorship, in which he found the delivery of lectures to a large audience a most beneficial exercise for his lungs. It has been remarked that the Germans are seldom affected with consumptive diseases: this is commonly attributed to the strength which their lungs acquire, by being

* *Elements of Physiology.*

frequently exercised in vocal music; for, among them, this constitutes an essential part of education.

4. *The Muscular and Locomotive Organs.*

So irresistible is the natural impulse which prompts to action the muscles and limbs, that, in health, a positive pleasure arises from their activity, although it may be accompanied with fatigue and danger, as happens in many gymnastic exercises and field-sports: their inactivity is, on the contrary, a cause of much uneasiness. Their action, when subservient to any particular purpose, is under the control of the will; it is subject to the sensitive faculties, and receives from them its impulse and direction; for the voluntary movements which the muscular and locomotive organs execute are a consequence of our sensations, and of the judgments which we form from them. A judicious training of these organs would tend considerably to improve the human frame. Grace of deportment, elegance of manners, ease of motion, strength, activity, dexterity, and all that is attractive and pleasing in the physical nature of man depend, in a great measure, on well-directed muscular exercise.

Gymnastic exercises afford the most effective means of cultivating and improving the muscular system and the locomotive organs. These exercises, and all sports which demand physical activity, call the muscles and bones into action, strengthen the limbs, and impart a healthy tone to the organs: under their influence the blood circulates freely, the respiration is quickened, the digestion becomes active, the nervous system is invigorated, and the redundant fluids are driven off by perspiration. But, as over-exertion of the muscles might cause accidents, or check the growth of young people, gymnastics should be practised only under the guidance of a person acquainted with anatomy; and, if judiciously conducted, they will keep up the harmony which nature has diffused through the human frame, or re-establish it when interrupted by neglect or other causes.

Gymnastic exercises should, whenever practicable, be carried on in the open air; their kind and duration should always be adapted to the particular constitution of children, who should not be allowed to attempt exertions beyond their strength. Such exercises as are unnatural, or at variance with the design of bodily organisation, must be carefully avoided. Nature is the best guide in every pursuit. Before adopting any exercise, we should consider if it be consistent with the mode of action assigned by the Creator to the physical functions.

In a political point of view, governments would do well to give every encouragement to this branch of hygiene; for it is important to a state to possess an active and vigorous population. It was, among the Greeks and the Romans, the basis of national education. The great attention which they paid to it, contributed not a little to the surprising success of their arms. The Greeks, especially, were, as a nation, physically and intellectually, a superior race of men; and there is reason to believe, that their unrivalled attention to physical education was highly influential in producing this result.

Gymnastics embrace all the accomplishments of which the organs of voluntary motion are the instruments, and which may be pursued as relaxation from mental labour. Such exercises are not destitute of moral influence; for they generate courage, perseverance, self-control; and, in giving the power, they foster a disposition and excite a desire to assist our fellow-creatures in danger. Nor is gymnastic training destitute of mental action; for, although the exercises of the muscles and limbs chiefly tend to physical improvement, the mechanical operations in which these are engaged cannot, in the commencement, be performed independently of attention, memory, judgment, and imagination.

SECT. V.—PHYSICAL ACQUIREMENTS.

The gymnastic exercises, accomplishments, sports, and useful arts, which are suitable for general adoption, and which may enter into a complete course of physical education, are the following:—

Games and Gymnastic Exercises.	*Accomplishments and Sports.*	*Useful Arts.*
Hoop-rolling with either hand.	Singing.	Oral-reading.
Rope-skipping, backwards and forwards.	Instrumental Music.	Penmanship.
Battledore with either hand.	Dancing.	Stenography.
Ball-playing.	Fencing.	Linear drawing.
Prisoner-bar.	Sparring.	Lithography.
Leap-frog.	Riding.	Engraving.
Long marches.	Swimming.	Modelling.
Ruling, backwards and forwards.	Rowing.	Surveying.
Leaping in length, in height, and in depth.	Shooting.	Gardening.
Vaulting.	Hunting.	Basket-making.
Climbing.	Archery.	Book-binding.
Swinging.	Billiards.	Turning.
Wrestling.	Racket.	Cabinet-making.
&c.	Cricket.	Mathematical instrument-making.
	Skating.	&c.
	&c.	

Females, who are forbidden to indulge in many of these occupations, may resort to callisthenics, and to arts suitable to them, such as plain and fancy needlework, millinery, dress-making, artificial flower-making, and other arts which more particularly appertain to their sex.

All the above exercises and acquirements should not be indiscriminately pursued; and, although they are generally beneficial, yet, as they have each their special sphere of physical improvement, perseverance in any of them should be regulated by the particular circumstances of the individual. Among the numerous useful arts of life, we have here mentioned only a few, such as all classes of people may practise for relaxation from intellectual occupations. In making a selection, the preference should be given to those which favour most the cultivation of attention, demand most dexterity, are most consistent with future pursuits, and present the greatest chance of utility in after-life.

Young persons should be induced to attend to manual occupations and useful arts, which might alternate with mental pursuits; such occupations and arts would not only be to them a never-failing source of amusement, but would give them early in life a command of their hands, and would usefully exercise their organs of sense. The excellence at which mere children often arrive in mechanical operations and in some of the fine arts, sufficiently proves the early natural capabilities of the physical powers, and the law of nature, in regard to the order of physical and intellectual education.

Locke and J. J. Rousseau have recommended mechanical pursuits, the first as a substitute for "the useless and dangerous pastimes in fashion;" the second as a provision against adversity. Without contemning these motives, which are founded on reason, we take other grounds; we advocate such pursuits as necessary accompaniments to, and powerful means of intellectual education, and as the great instruments of civilisation. Labour and industry are for nations the safest means of prosperity, as they are for individuals the purest sources of property and independence. Hence the industrial element should enter more largely than it usually does in primary education.

SECT. VI.—INTELLECTUAL AND MORAL INFLUENCE OF MANUAL OCCUPATIONS.

The activity of the physical faculties being always, in their development, in advance of that of the mind, manual occupations not only may be indulged in before intellectual exercises can be seriously commenced, but serve as the best preparation for them; because most mechanical pursuits demand the co-operation of the mental powers. They particularly exercise attention and perception; they excite a spirit of observation and invention; they habituate the mind to the formation of plans, and the observance of proportion; they bring out, in fact, every intellectual resource.

The practice of any art, even the simplest, is the application of some of the principles of science: familiarising young people with facts illustrative of these, will, at a future period, render their study of science more interesting and profitable, as presenting to them innumerable opportunities of applying to practical utility the one in which they may then be engaged. In the business of life the union of practical habits and intellectual acquirements is useful, both to the capitalist and to the operative.

Mechanical ingenuity has, in many instances, given rise to intellectual pursuits of the first order. Many discoveries in the arts have led to the discovery of unknown laws in nature, and of new principles in science; for, in the progress of knowledge, theory generally follows practice. Had Stephen Mongolfier not been a practical as well as a scientific man, the hydraulic ram might for ever have remained as speculative and useless a philosophical project as it was in the hands of Hales. Haüy, the originator of the science of crystallography, Belzoni, the explorer of the antiquities of Egypt, James Brindley, James Ferguson, Herschel, Lord Rosse, and many others, preluded their scientific careers by purely mechanical operations. Peter the Great became a mechanic to civilise a nation.

If children are accustomed to the use of tools, and are gradually taught to work in paper, pasteboard, wood, and metals, according as their physical progress permits the difficulty to be increased, they will soon acquire a mechanical skill which may, at a future time, prove very beneficial to themselves and to others. Manual dexterity makes us, in a great measure, independent of others, and gives us the means of providing for our own comforts in most of the circumstances of life. It is indispensable in many professions, to travellers, to naval and military

men, to engineers, architects, and surgeons, but particularly to the votaries of natural philosophy. Those who have distinguished themselves by high conceptions in the sciences, and by useful inventions in the arts, have, for the most part, early in life, displayed a taste for mechanical operations, and have constructed with their own hands the instruments or apparatus necessary for illustrating their discoveries. Archimedes fabricated his own wonderful machines, Galileo made his own telescopes, Torricelli his barometers; Michael Angelo, Leonardo da Vinci, Roger Bacon, Benjamin Franklin, Kepler, Pascal, Newton, James Watt, Buffon, Humphry Davy, George Cuvier, Isambert Brunel, Charles Babbage, and many others, were aided by their mechanical skill in gaining celebrity, fortune, and the enviable glory of being the benefactors of mankind.

Let us encourage, among young people, games of skill and dexterity and all occupations which lead them to form plans and contrivances, which, in short, exercise their ingenuity, their patience and inventive powers. The early discovery of some artifice may, by opening the eyes of a child to deceitful appearances, save him, through life, from foolish credulity, and warn him against the deceptions of impostors.

Not only is manual occupation, like all bodily work, conducive to physical and intellectual improvement, but, in a moral point of view, it is most beneficial: it forms a bond of sympathy between the wealthy and the operative; it makes man submissive to an imperative law of his existence,—labour being the condition of human life; it calms his inclination to sensuality, exercises his patience and perseverance, and disposes him, by habits of industry, to tranquillity of heart. It must contribute to happiness; for the exercise of any faculty, physical, moral, or intellectual, satisfies one of the demands of man's nature.

If bodily labour be turned to a useful purpose, it will acquire a new degree of importance, and will become more interesting than if undertaken merely for the preservation of health. As the improvement of the individual ought always to be considered with a view to the benefit which society may derive from it, and which it has the right to claim, the physical powers of the child should be especially directed towards the acquisition of such arts and manual occupations as may be rendered subservient to the well-being of the community. Thus, physical training truly becomes an auxiliary to moral education.

No system of education is complete which does not provide,

by due attention to useful arts, for the activity of the physical powers, for relaxation from mental labour, and against reverses of fortune. There is no station in society, be it ever so high, which may dispense with them altogether. Many instances might be recorded, in which even powerful princes have derived benefit from skill in manual occupations. By a law of Solon, the children whose parents had neglected to have them instructed in some profitable trade, were relieved from the obligation of maintaining them in their old age.

SECT. VII.—LIMITS WITHIN WHICH PHYSICAL ACQUIREMENTS SHOULD BE CULTIVATED.

Physical education embraces the first three periods of youth; but the exercises which it prescribes, particularly gymnastics, should be continued through life, without however, interfering with intellectual pursuits; they are necessary at every age, in order to keep up health and the harmony of the whole animal economy. Some of those exercises may not always be practicable: it is the duty of persons entrusted with the care of children to select for them such as may suit their social position, their sex, constitution, and temperament, as also the vocation or profession to which each is destined.

The end proposed by the educator ought to be to cultivate the physical powers of the child, so as to keep them within the sphere of action which is suitable for the destination to which he is called by nature and by society. Physiology lays down the fundamental principles by which this object may be attained, and health may be preserved. An educator must therefore be acquainted with this science: his skill consists in preventing disease, as that of the physician, in curing it; and, as prevention is better than cure, so is the office of the educator more important than that of the physician.

In the present state of society, when man is placed in circumstances which constantly tend to make him deviate from the simple path of nature, the study of her laws, as explained by physiology, becomes indispensable to those who have to provide for the education of youth; for, if they are not thoroughly acquainted with the nature and functions of the bodily organs, how can they minister to them their due share of exercise, or restrain their activity within judicious bounds? The neglect or over exertion of any of the physical faculties is equally injurious:

if their inaction keeps them in impotent debility, an excess of exercise, on the other hand, would bring a premature decay of the over-tasked organ, or destroy the symmetry of the frame by the over-development of some particular muscle.

The excessive activity of the physical faculties is usually acquired at the expense of higher faculties: it is a well-known fact, that mental excellence is rarely the portion of those who devote much care and time to increasing the volume of their body and the force of their muscles. We ought to seek in muscular action only a means of health and diversion, without aiming at a superiority which is not consistent with the occupation of a highly cultivated mind. "Men," observes Londe, "who give themselves up exclusively to muscular exertions, are deficient in sensitiveness, moral tact, reflection, and intellectual labour." * "It would be difficult," says also Richeraud, "to find in history the example of a man who has combined with the physical powers, which the muscular temperament implies, distinguished strength of the intellectual faculties. For excelling in the fine arts and in the sciences, there is need of exquisite sensibility, a condition absolutely at variance with much development of the muscular masses."† Tissot's aphorism will be found true, in general, that the man who thinks the most digests the worst, and *vice versâ*, he who thinks the least digests the best.‡ (1)

* *Gymnastique Médicale.*

† *Nouveaux Elémens de Physiologie.*

‡ *De la Santé des Gens de Lettres.*

(1) See Appendix.

CHAPTER II.

MORAL EDUCATION.

SECT. I.—DEFINITION.

MORAL education has for its object the cultivation and direction of the moral faculties; so as to enable us, through their means, first, to acquire the virtues and fulfil the duties required by our condition as creatures of God, and social beings; and, secondly, to imbibe the sentiments and inclinations which can ensure individual happiness.

Religion may be considered as the basis of morality; for no moral principle is safe which is not founded in religion; but, for the convenience of classification, we will consider the actions of man in three different points of view, as they immediately relate to his Maker, to his fellow-creatures, and to himself. The moral education, which embraces the immediate relations of man with the Divinity, we will call *Religious Morality;* that which embraces his relations with society, *Social Morality;* and that which concerns him individually, *Individual Morality.*

The fulfilment of our duties to God constitutes *Piety;* the performance of our social duties, *Justice;* affections and social virtues are the elements of *Goodness;* the duties, virtues, and inclinations of individual morality combine to produce *Wisdom.* Piety, Justice, Goodness, and Wisdom, are the acquirements of the soul which, as stated in our definition of education, raise man to the image of his Maker: the possession of them in their highest degree constitutes *Moral Perfection.*

SECT. II.—MORAL FACULTIES.

Progress towards moral perfection is based on the right exercise of the moral faculties. The soul is perhaps more than the body subject to the great law of education. Its improvement is also of greater importance, as it affects society at large, and the

eternal as well as the present condition of man. According as the moral powers are well or ill directed; according as virtuous or vicious inclinations, good or bad sentiments, affections or passions, are respectively indulged in or repressed, so shall the individual acquire moral or immoral habits; so shall he be happy or miserable, a useful or a disreputable member of the community.

The moral faculties which education proposes to cultivate and direct, in order to unfold the qualities which constitute moral acquirements, and to advance towards moral perfection, are, *Self-love*, *Sympathy*, *Curiosity*, *Conscience*, and *Will*.

These moral faculties, like the physical faculties, are inherent in our nature; they exist in every individual, independently of exercise or reflection; but their activity is greater or less, according to their original degree of energy, which varies in different individuals, and according, also, as they have, or have not been cultivated: whereas the moral acquirements, that is, the consciousness of duties, the virtues, affections, and inclinations which proceed from these faculties, and which constitute the elements of piety, justice, goodness, and wisdom, exist in men only as a consequence of the predominating energy of certain faculties, or inasmuch as they have been inculcated by suitable example and exercise. "Most of those excellences," says Locke, "which are looked on as natural endowments, will be found, when examined into more narrowly, to be the product of exercise, and to be raised to that pitch only by repeated actions."

1. *Self-Love.*

Self-love is the great link which connects the lower and the higher nature of man; for it comprises within its sphere of action his sensual appetites as well as his moral and intellectual determinations. It manifests itself by two impulses—*self-preservation* and *self-gratification*, which create in him desires, hopes, or pleasures, in reference to whatever is good, and dislikes, fears, or pains, in reference to whatever is evil. His irresistible tendency to protect and prolong his existence, as also to secure agreeable and avoid disagreeable emotions, becomes the source of all his wants, keeps up his activity of mind and body, stimulates his progress in the arts which minister to his well-being and enjoyment, and promotes his advancement in civilisation and in all the refinements of life.

Self-interest suggests the propriety of obeying the laws of nature, as curiosity prompts us to inquire into them; for obedience is attended with its own reward, and disobedience with its own punishment. Thus the laws of nature are closely connected with morality, which is itself one of the great laws of humanity. Self-love enhances the value of self-denial; for what would be the merit of sacrificing ourselves to others, if we cared not for our own existence, and if we did not naturally prefer our well-being to that of our fellow-creatures?

This faculty tends more immediately than any other to the advantage of the individual; and hence some philosophers—among others, Epicurus, Hobbes, Hume, and Helvetius—disregarding the other elements of man's constitution,—have erroneously maintained that self-interest is the only motive of his actions. Subservient, however, as it is to his well-being, when unchecked, it becomes egotism, and produces vanity, pride, and all the desires, appetites, and passions which crave and seek personal gratifications alone; among which may be reckoned fortune, power, honours, and glory. If self-love be early and habitually indulged in, to the exclusion of the higher moral faculties, which might counterbalance its pernicious effects, it will give rise to such vices and crimes as are analogous to the particular manner in which it has been over-excited,—to ambition, avarice, gluttony, drunkenness, debauchery, envy, revenge, robbery. It is thus that children, whose selfish propensities have been unreasonably gratified, so frequently disappoint, in after-life, the fond expectations of their parents, and cruelly punish them for their blind and culpable indulgence.

As the imperative impulse to self-preservation and enjoyment prompts us to cultivate all our faculties, with a view to the benefits which result from their development, it may, by a proper and careful direction, become a powerful agent in education. When guided by reason, it leads to those duties, virtues, and inclinations which best secure our well-being; such as *temperance, moderation, industry, patience, prudence, love of cleanliness and order, desire of knowledge and esteem*,—in fact, all the moral qualities which constitute Wisdom.

Self-love is necessary to advance in any pursuit, because it is conducive to self-esteem and, hence, to self-confidence, on which success depends. The love of approbation and the desire of happiness which self-love begets, induce us to adopt every means of self-improvement, and to do good to others in order to gain

their good-will. It is to this principle of action, which prevails in childhood, that emulation, praise and blame, rewards and punishments, owe their efficacy as means of education; however, we should endeavour gradually to substitute for it higher motives of action.

Corporal punishments, the most degrading of all appeals to love of self, are particularly objectionable, as being in direct opposition to one of the essential attributes of adequacy in punishment, which requires that its severity should be proportionate to the repetition or magnitude of the fault. Their efficacy, not depending so much on the bodily pain as on the shame attending its infliction, diminishes gradually, as, by repetition, the shame wears off, until at length, in many and the worst cases, it ceases entirely. Handed down to us from times of barbarism, and from the monastic discipline of the old schools, as a means of correcting defects in moral character, errors in judgment, and the giddiness of youth, they have now been condemned by the good sense of the enlightened portion of mankind: they are forbidden in France, in Holland, in the greater part of Germany, and even in Russia; yet they are retained in these islands, not accidentally and partially, but systematically and almost generally, as the only regulating power of public schools. The British legislature ought, in the name of humanity and civilisation, to interpose their authority in favour of youth, if the tenderness of parents will not prompt them to take the lead in this philanthropic reform. Heads of schools will rejoice on the day they are freed from the painful office (now forced upon them) of administering this degrading punishment. Society ought, indeed, for her own sake, to put an end to this odious practice; for it usually happens that degradation in youth produces hypocrisy, obduracy of heart, and wickedness in after-life. Bernardin de St. Pierre attributes to the prevalence of corporal punishment the unnatural and cruel pleasure which the English continue to take in the disgraceful and immoral exhibitions of pugilism, the offspring of barbarous ages. *

2. *Sympathy.*

After the love of self, comes, in the natural order of development, the love of others, of which sympathy is the grand principle. This faculty tends to public good as self-love does to

* *Etudes de la Nature. Etude* 4.

private; the one is the ground-work of social morality, and the other of individual morality.

Sympathy manifests its existence at the dawn of life. The first smile of the child is the reflection of that of his mother. The first elements of language which he catches, the first joys and the first terrors which take possession of him, have their source in her countenance: it is from her voice, her looks, her gestures, that he learns the meaning of her words, and that his moral education commences. Such is the force of this innate principle, that the very shudder of a timid or superstitious person in the presence of a young child, may suffice to create in him for life an unconquerable fear at the sight of the object that caused it. The tender care with which he is habitually treated, the pleasing circumstances with which he is surrounded, foster in him a cheerful temper and an affectionate disposition, which are the most powerful springs in education.

It is impossible to witness any marked emotion, or even to hear it forcibly described, without a very sensible degree of the same emotion springing up in our breasts, and without, in our turn, assuming the corresponding tones, looks, and gestures in its expression. To this effect of sympathy must be ascribed the universal intelligibility of the language of action, and the peculiarities of dialect, accentuation, gesture, and manner, which characterise nations, provinces, families, and even certain professions and classes of society. The sociability of man arising therefrom is so indispensable to his well-being, that he ardently seeks for intercourse with his fellow-creatures, and is never so miserable as when left in complete loneliness. Solitary confinement for life is to the criminal a more severe punishment than death.

The principle of appeal to the testimony of others owes its existence to sociability, combined with curiosity: man has a natural tendency to make up his own deficiencies from the common consciousness of mankind. The greater part of his notions, beliefs, opinions, hopes, and convictions are the result of his social communion with his fellow-creatures. There is, in fact, a necessity for the collective influence of humanity to aid on the progress of truth and usher in the reign of love.

Sympathy, seeking for action in the animated world, becomes the source of self-denial and of all generous determinations. It counteracts the baneful effects of the selfish principle; it promotes a desire of acquiring knowledge, by the pleasure which the communication of it imparts; it gives birth to all kind

affections and to all social virtues—the elements of Goodness; it is, in fact, the foundation of society, the great bond of union among men, and constitutes in them an inalienable right to association and to the interchange of their thoughts. The instinct which prompts us to rejoice and grieve with others, to communicate our sentiments and our ideas, our joys and our sorrows, or to inquire into those of our fellow-creatures, is a manifestation of sympathy. Corresponding with that instinct, the unmistakeable expression of inward feelings, which our looks, gestures, laughter, tears, and cries convey independently of our will, is a further proof that we are born social and communicative beings.

No faculty shows more manifestly than sympathy the admirable provisions of God in carrying out His ends: it prompts us to the obedience of His divine command—"Thou shalt love thy neighbour as thyself." Hence, from the efforts we make to enter into the sentiments of others, originate all kind feelings and affections, such as *filial love, benevolence, humanity, desire to please, affability, friendship;* and from the efforts to bring down our emotions to the level of those of others, spring *modesty, charity, generosity, indulgence, forgiveness,*—in fact, all the social virtues. *

It is the right cultivation of sympathy which, by identifying our happiness with the happiness of those who surround us, induces us to desire the well-being of our fellow-creatures, and leads to the observance of the great law of humanity, which prescribes "to do unto others as we would wish them to do unto us." According as self-love or sympathy is the more cultivated in the child, so will the selfish or the social feelings prevail in the man.

Sympathy is closely allied to the intellectual law of association, which essentially aids the power of expression; its direction, for the acquisition of this power, should be an object of serious attention to the young. In elocution, it affects the tones of the voice and the expression of the countenance, by bringing them in unison with the ideas and sentiments to be expressed, or suiting them to the persons to be addressed. The power of convincing and persuading implies the capability of sympathising with others, of entering into their thoughts and feelings: hence this faculty becomes the source of all the emotions and affections from which eloquence flows.

* See Adam Smith's *Theory of Moral Sentiments.*

The necessary effect of sympathy is to produce an aptitude to *assimilation* or *imitation*, or, rather, assimilation is a manifestation of sympathy. Man is the most imitative and impressible of all creatures; he has a natural tendency to assimilate to those who surround him, in manner, tastes, sentiments, and language. This imitative or sympathetic principle, by prompting the child to assimilate himself with those who come in contact with him, greatly accelerates his progress in everything he requires to learn, and thus produces results which tend materially to the improvement and advancement of the human species. It is, in fact, from sympathy that the child adopts the tastes and sentiments of his parents, their notions and expressions, their religious and political opinions, and the greater portion of the information most needed through life. The power of imitation is most active in the first periods of youth, when no habit has yet been formed to weaken its action. It is particularly in acquiring the native tongue and all imitative arts, that it exercises a powerful influence in intellectual education. This aptitude of the child must be cautiously directed, lest he should, when thrown into society, assimilate himself to those who are in error or in vice. This also makes it imperative on parents and educators to be most careful about their own words and actions: their virtues and vices usually decide the fate of the child.

3. *Curiosity.*

Curiosity is the necessary consequence of the perfectible nature of a being who commences life in weakness and ignorance. To accomplish our high destinies, Providence has endowed us not only with the power of removing this innate weakness and ignorance, and of elevating ourselves to the noblest conceptions, but also with an uncontrollable desire to exert this power. The eagerness with which, from the earliest infancy, we seek new objects and new sensations, observe external phenomena, and attempt to discover the causes of the facts which strike our senses, sufficiently unveils our natural tendency to seek truth and acquire information. Curiosity extends the dominion of thought; conjointly with self-love and sympathy, it incites to every acquisition, every discovery, every improvement, and consequently to civilisation. It leads from the examination of the wonders of Creation to the conviction of the existence of a First Cause of all things, and to a consciousness of God's infinite power, goodness, and wisdom. As self-love engenders hope, and sympathy,

charity; so does curiosity prepare us for the blessings of faith: combined with well-directed conscience, it fosters a love for God.

We are endowed with senses susceptible of feeling pain and pleasure, and are, at the same time, surrounded with natural dangers and means of enjoyment which we know not, and which we are prompted to ascertain, in order to shun the former, and avail ourselves of the latter. The instinctive impulse of curiosity rests, then, on the selfish motives of preservation and gratification, and may, in the unconsciousness of childhood, be exercised on improper or injurious things. It should be one of the objects of education to modify these motives, to lead the child to useful inquiries, and make him seek truth for its own sake. This noble direction given to curiosity, is one of the characteristics of a good education.

Curiosity acts a prominent part in the instruction of youth, and, especially, in the acquisition of the native tongue. There is not a conversation which children overhear from which they do not gain ideas and expressions. This faculty affords a powerful means of fixing their attention. Their insatiable thirst for novelty, and the activity of their perceptive powers, which stimulate their inquisitiveness, have undoubtedly been given to them by an all-wise Creator for the great purposes of education. Instructors should avail themselves of this bountiful provision of nature, to direct and cultivate the spirit of inquiry of their pupils in reference to praiseworthy objects, and particularly to those which may suit their future walks in life. They ought to aim, first, at exciting, next, at gratifying their curiosity. The judicious succession of excitement and gratification constitutes excellence in teaching.

The desire of knowledge, which is another name for curiosity, would remain a strong inclination through life, were it not checked in childhood by injudicious treatment. Among the causes destructive of it, may be mentioned the following: 1. Making children feel that their inquisitiveness is importunate; 2. Giving them words for ideas; 3. Forcing information on them at unseasonable times; 4. Over-tasking their attention; 5. Associating pain with study; and, 6. Indiscriminately condemning as a vice all the manifestations of this valuable propensity.

4. *Conscience.*

Conscience, the next faculty, is a natural disposition to feel pleasure at moral good and pain at moral evil, and, hence, to

prefer good to evil. It has been given to man to guide him through the difficulties of life, towards happiness, the goal of his wishes. It comes into action only after the first glimmerings of reason, whose office it is to distinguish truth from falsehood, virtue from vice, justice from injustice.

This faculty does not discriminate between right and wrong; it acts under the guidance of reason; and as the latter is not infallible, it follows that men often differ in their notions of right and wrong, according to their education: to God alone, however, are they responsible in such matters. But, in every man, inward satisfaction or remorse, the manifest indications of conscience, accompanies the actions reputed good or bad in the society of which he is a member. It is then the business of parents early to imbue their children with a consciousness of what the Christian religion teaches us to be right or wrong. In the first stages of life, this consciousness will arise from a proper direction being given to the moral faculties; and, when virtuous habits are formed, they will exercise a due control over every appetite, desire, and inclination, the indulgence of which is inconsistent with the dictates of conscience. In infancy the grosser instincts predominate and command as masters; but, under the influence of good example and enlightened education, as the child, by the continual exercise of the intellectual powers, acquires ideas and unfolds his reason, the rational determinations mingle with the instinctive, and, at length, prevail over them in the man whose conscience has been properly exercised. This internal voice may be stifled for a time amid the tumult of vicious indulgence; but it can never be wholly subdued.

Conscience is the innate moral principle, the stamp of the Divinity in man; on its culture depends the right direction of the other moral faculties. It warns against all selfish motives, preserves from the evil consequences of indiscriminate assimilation, guides in the choice of objects worthy of exercising curiosity, and weighs the influence which ought to govern the will. Its action is indispensable to society, for it secures a sense of *Justice*, by giving a consciousness of all social duties, such as *obedience*, *veracity*, *probity*, *gratitude*, *discretion*, and *patriotism*. It contributes to individual happiness, by causing pleasure in the performance of duty. The inward satisfaction which results from a good conscience secures resignation and contentment in adversity, disposes the heart to every kind feeling, leads to self-improve-

ment, and, by a natural desire for perfection, to the love of Him who is the source of all perfection.

Sympathy and conscience should be particularly exercised with a view to education; for they are the faculties which enable us to act from virtuous motives. It is their combined impulse which prompts us to imitate the good actions we witness, and to bestow affection and esteem on their authors. Let appeals be frequently made to the child's conscience, and he will soon form the habit of acting on this moral principle. Such appeals would be motives of action far preferable to those which are usually made to self-love through emulation, praise, reward, or bodily fear. The more frequently we appeal to conscience as a guide, the more easily shall we distinguish good from evil, the more inclined shall we be to adopt what is right, and avoid what is wrong, the more successfully shall we also regulate our inclinations, and moderate our passions. The self-examination prescribed by the Christian religion is founded on this truth, as was also Benjamin Franklin's journal of morality; and few men ever reached a higher degree of moral perfection than he did.

This voice speaking within us becomes the true guide which may lead Christians in the path of righteousness, when it takes for its rule the will of God. It is therefore of the utmost importance that the understanding of the young be made acquainted with the natural laws and the Divine commands, in order to render the verdict of conscience a source of real satisfaction. God, in His infinite mercy, has proclaimed our rule of conduct in the most manifest and the most unerring manner: revelation, His divine word, is not only a safe guide through this short life, but it alone can lead us to life eternal.

5. *Will.*

Will, or volition, is influenced in its determinations by self-love, which seeks enjoyment and shuns pain; by sympathy, which begets sentiments and affections more or less estimable; by curiosity, which may pursue laudable or blameable objects of inquiry; and by conscience, which prefers good to evil: but these determinations demand the light of reason to be properly directed; that is, to incline to virtue in preference to vice, and to truth in preference to error. Thus is the union, which we have already found to exist between our moral and our intellectual nature, rendered closer by the action of the will.

Man becomes, by the right of this faculty, the arbiter of his

actions: he is a free, rational, and self-governing agent. As self-love is the principle of his individuality, sympathy of his sociability, curiosity of his perfectibility, and conscience of his morality; so is will the principle of his native liberty, and the harbinger of immortality.

It is especially towards a judicious direction of the will, that all the efforts of the educator should tend; for this faculty exercises a powerful control over almost all the others: it is the soul of all the exercises to which education subjects man; and it alone can secure success. Will is the fulcrum of Archimedes; with it all is possible: "Peut qui veut," Napoleon often said. It gives an impulse to the whole system; but it presides more particularly over the operations of the intellectual powers. Education, properly speaking, is only the direction of the will and the formation of its habits:—an occasional act of virtue does not make the virtuous man; the perfection of the moral character consists in an habitual disposition to do what is useful and good.

Children should early be made to feel all the importance of a faculty on which their future self-control and self-government depend. Their improvement is not in proportion to the number of teachers and external assistance which the opulence of their parents may provide for them, but to the energy of their own will, to the earnest attention and perseverance with which they apply themselves to the various objects of study. Innumerable examples, taken from all ages and countries, might be adduced, of men who have, by the force of their will, without the assistance of teachers and, under the most adverse circumstances, raised themselves from the lowest condition to the highest eminence in the moral and intellectual world. For some of those examples we refer the reader to that excellent work, "Pursuit of Knowledge under Difficulties," which fully illustrates what can be accomplished by the energy of the will.

The most effective education is that which we give to ourselves; because, proceeding from the will, it has at its disposal all the faculties of the body, all the energy of the soul, and all the powers of the mind. Man is born for self-improvement, which is the essence of human perfectibility. This truth is sufficiently proved by the extensive range of physical and intellectual acquirements which he makes in childhood of his own accord, and by his unaided efforts. We have already adverted to these early manifestations of self-education as prompted by the innate powers of imitation and curiosity. But voluntary attention to

the systematic departments of knowledge, which constitute literary or scientific instruction, can take place only when reason is sufficiently developed to enable the learner to appreciate the importance of these departments of instruction, and to feel the necessity of system in the pursuit. It is only in the third period that it can be commenced methodically. In the first two periods, the principal object of education should be to give to the child physical, moral, and intellectual habits, as a preparation for the time when self-education shall begin. We must then early accustom him to rely little on the assistance of others, and to seek in himself the sources of his own improvement. The conviction once acquired that progress depends on self-exertion, will be the starting-point in self-education.

Spontaneousness should be encouraged in childhood; self-will, so common among young people, should be regulated, not broken: it may become, if properly directed, noble firmness in manhood. Every tendency to a vice might, by judicious management, be turned to account for the acquisition of a virtue. By suitable training of the will, a child may be made to pursue virtue and knowledge for their own sakes, and be stimulated to accomplish, each day, something more than on the preceding. This continual endeavour to surpass oneself is a motive to improvement much purer and nobler than the desire of surpassing others, which springs from pride and vanity. The secret satisfaction attached to success in the performance of any action, or in the acquisition of any information, is one of the most powerful incentives to mental exertion in every pursuit. It is thus that will engenders patience and perseverance, the two great instruments of genius.

SECT. III.—MORAL ACQUIREMENTS.

The moral faculties are the instruments by which are acquired the qualities which constitute moral perfection. It is especially on their proper cultivation during the first three periods that the success of education depends; for the early practice of duties, virtues, affections, and inclinations which proceed from them, having once rendered them habitual, the object will be attained: morality will then be a second nature to the individual. Virtuous habits being once formed, there is little danger that he will afterwards turn to a bad purpose the power which physical and intellectual cultivation confers on him. This moral training, the surest preservative against evil tendencies, is now the more

necessary as the progress of the arts and sciences daily increases the power of man.

The moral faculties to which we have now adverted are often erroneously included in the class of moral acquirements, and the latter in that of innate powers; the virtues, duties, affections, and inclinations which constitute the moral acquirements, and which are the object of moral education, are not either, in general, clearly defined, or sufficiently distinguished the one from the other. This confusion has not a little contributed to retard the progress of educational science.

Obedience to parents, veracity, sincerity, probity, gratitude, discretion, loyalty, patriotism, are not virtues, but social duties, or obligatory acts of Justice towards others; the neglect of them is a transgression which calls for punishment. The fulfilment of duty, which it is the office of conscience to secure, merits no acknowledgment; whereas social virtues, based on self-denial, are self-imposed sacrifices which claim gratitude: the absence of a virtue, although blameable, is not, according to human justice, liable to penalty. Modesty, charity, generosity, hospitality, forgiveness, are the virtues which, with filial love, benevolence, humanity, affability, and other affections, constitute so many species of Goodness, and which spring from sympathy, as we showed in treating of that moral faculty.

These duties, virtues, and affections belong to social morality, and are practised with a view to the well-being of others; but there exists another class of moral qualities which have for their object the well-being of their possessors: these are the acquirements which form the elements of Wisdom or individual morality. They arise chiefly from well-directed self-love, as do the social qualities from sympathy. In this class may be mentioned—1. Duties, such as temperance, frugality, moderation in desires, resignation, industry, self-respect, consistency. 2. Virtues, as meekness, equanimity, patience, prudence, perseverance, courage, fortitude. 3. Inclinations, as love of cleanliness, of simplicity, of order, of occupation, desire of improvement, and of esteem. All the moral qualities which constitute *Justice* will gain for us the esteem of our fellow-creatures; those which constitute *Goodness* will secure their affection, and those which constitute *Wisdom* will command their admiration.

It is time that a system of moral education based on the constitution of man, his duties to God, to his fellow-creatures, and to himself, be formed, whereby he may fulfil the designs for

which he was created. He who shall give a clear and complete nomenclature of the moral faculties and acquirements, will lay the first stone of this system, and will thus confer a boon on society. With regard to the numerous faculties and organs with which phrenological educationists have enriched their catalogue, we doubt whether sound philosophy will ever recognise them.

Nature is always sparing of causes, and prodigal of effects: with a few elements variously distributed and combined, she produces in the physical world an endless variety of organic and inorganic matter; so, in the moral and mental constitution of man, a few innate principles suffice to produce innumerable dispositions and characters. All human beings, with the exception of those whose cases are anomalous, are born with the same faculties, as all the lower animals of the same species, are endowed with the same instincts, and as all plants and minerals of the same kind, are formed of the same elements, and possess the same specific properties. It is contrary to the simplicity, uniformity, and universality of nature's laws to consider the numberless dispositions of men as so many primitive principles, and to suppose that faculties, the essential characteristics of the human species, would remain unmanifested in a great number of individuals, owing to supposed depressions of the cranium.

Consistency and analogy incline us to recognise only a very limited number of innate powers, physical, moral, and intellectual, as common to all individuals, but varying in quality and activity in each. With regard to the infinite diversity of human character, it is only the effect of the relative proportion of energy of these powers which, differing in all individuals, produces different combinations, that are again modified by the ever-varying circumstances under which they act. The climate, the laws, the form of government, the degree of civilisation, the social relations, the mode of life, and the kind of education, exert all a direct influence over the human character.

That which phrenologists, for example, call the faculty of tune, does not appear to us to be a simple primitive power, but the result of an exquisite delicacy of hearing and of a peculiar sensibility of the nervous system, joined to that kind of sympathy which prompts to the imitation of modulations. What they call the faculty of language seems to be a compound power resulting from an active disposition to communication and imitation—the offspring of sympathy—combined with correct hearing, flexible vocal organs, clear conception, ready recollection, and quick

analogy. The energy of this power depends on that of the perceptive and the reflective faculties which elaborate thought, on the social dispositions which prompt to the communication of them, on the mental operation which attaches ideas to conventional signs, and on the physical functions which produce vocal sounds and articulations. We are, consequently, inclined to suppose that this very complicated power proceeds from the simultaneous action of different portions of the brain, rather than from the narrow cerebral localisation which phrenologists assign to it with so much mathematical precision. The leading facts and principles upon which phrenology rests appear consistent with general induction and the laws of our constitution; but this science, yet in its infancy, fails by the multiplicity of the elements, as exhibited in its nomenclature. Although it must be acknowledged that its investigations have successfully aided in elucidating the connection of the brain with emotions and mental manifestations, it is doubtful that they will ever lead to a sound system of psychology.

Without pretending to establish a standard classification, we present the five faculties which we have noticed as the only moral principles which seem to be primitive and universal. We have collected in the following Table the principal qualities, or moral acquirements, which result from a proper exercise of these faculties, and which are the great object of moral education, with an indication of the approximate age at which they may be gradually acquired:—

PROGRESSIVE ORDER OF MORAL EDUCATION.

APPROXIMATE AGE.	RELIGIOUS MORALITY.	SOCIAL MORALITY.			INDIVIDUAL MORALITY.		
	RELIGION.	*DUTIES.*	*VIRTUES.*	*AFFECTIONS.*	*DUTIES.*	*VIRTUES.*	*INCLINATIONS.*
Until the age of 6.	*Idea of God.* His omnipotence. „ omnipresence. „ justice. „ goodness. „ wisdom. *Religious feelings.* Love of God. Fear of God. Reverence of God.	*Docility.* Submission. Obedience. *Veracity.* Sincerity. Frankness.	*Self-denial.* Disinterested-ness. Modesty. *Beneficence.* Charity. Obligingness.	*Love.* Filial piety. Brotherly love. *Benevolence.* Humanity. Pity.	*Temperance.* Sobriety. Frugality. *Moderation.* Contentment. Resignation.	*Meekness.* Equanimity. Patience. *Prudence.* Vigilance. Foresight.	Love of cleanliness and simplicity. Love of order and regularity.
From 6 to 12 Years of age.	*Prayer.* Confidence in God. Gratitude to God. Humility. *Worship.* Divine service. Religious rites.	*Probity.* Equity. Gratitude. *Uprightness.* Discretion.	*Generosity.* Liberality. Hospitality. *Indulgence.* Tolerance.	*Desire to please.* Politeness. Affability. *Friendship.* Devotedness.	*Moral activity.* Diligence. Industry. *Exactness.* Punctuality.	*Perseverance.* Assiduity. Constancy. *Courage.* Coolness.	Love of occupation. Desire of improvement. Love of the beautiful.
Over the age of 12.	*Beliefs.* Faith. Hope. Tenets and dogmas.	*Honour.* Loyalty. Patriotism.	*Forgiveness.* Clemency. Magnanimity.	*Esteem for merit.* Respect for old age. Philanthropy.	*Self-respect.* Self-reliance. Consistency.	*Firmness.* Decision. Fortitude.	Desire of approbation. Love of freedom.
	PIETY.	JUSTICE.	GOODNESS.		WISDOM.		

Although this tabular arrangement, considered in the abstract, indicates the natural and probable order in which the manifold objects of moral education may be gradually instilled into the hearts of children, we are aware that it is neither necessary nor even possible to follow it strictly in all cases. However, this classification, consistent with our other subdivisions of the subject, by presenting in one view the principal departments of moral training, may tend to impress the educator with the vast extent of the subject, and guide him through its details.

SECT. IV.—ELEMENTARY PRINCIPLES OF MORAL TRAINING.

1. *Religious Morality.*

The limits and special object of this work not permitting us to investigate all virtues, duties, affections, and inclinations, we will advert only to those which constitute the elementary principles of moral training in its three relations—religious, social, and individual.

Of all these it is almost needless to state that religious feelings, early impressed on the heart of a young child, are to him the safest foundation of moral perfection and the only true basis of happiness. A sense of the omnipresence, infinite goodness, and supreme justice of the Almighty, will insensibly form in him habits of meekness consistent with Christianity; it will inspire him with a salutary fear, and, particularly with a love of God, which is the origin of the kindest sentiments and the highest virtues. True morality is but a portion of religion.

The love of God is the religious principle, as conscience is the moral one. These two principles are intimately connected, and should grow together. Piety and truth, their offspring, by removing the pressure of selfishness and error, will give to the soul all its energy, will fertilise and expand the mind.

Religion and morality are inspired by example rather than taught by precept. A child, in order to be deeply impressed with the existence and attributes of the Creator, ought to imbibe a consciousness of them so early in life that he may not remember the time when he had no such idea. To this effect, religious feelings should be connected with every object that excites our gratitude to God and affects the young with wonder and delight. They should be led to God, as St. Augustin and Fénélon prescribe, by the contemplation of nature, and to virtue, by the thought of God. Thus, by deep, strong, and permanent asso-

ciations, the seeds of real piety and devotion will be sown, and the mind be prepared and disposed to the reception of the sublime truths which the Holy Scriptures proclaim as the basis of salvation.

Although the religious worship and belief of the child ought to rest on a conviction acquired in childhood, the truths of Christianity, and the particular dogmas which he is destined to embrace, should be unfolded to him only when his reason is capable of understanding the meaning of the terms in which they are expressed, and of appreciating the nature of the evidence on which they are grounded.

2. *Social Morality.*

On the threshold of social morality stand love and obedience to parents, and self-denial, which are the first effects of well-directed sympathy and conscience, and of duly controlled self-love. These first moral acquirements, which can be effectually secured by the affection, justice, consistency, firmness, and good examples of parents, will afterwards give rise to all the duties, affections, and virtues which constitute the moral and social man.

Obedience, the first duty which the child is called upon to fulfil, habituates him to surrender his own selfish desires from a consciousness of higher obligations, and is to him a preservative against vicious propensities. Obedience should be passive in the first years; and, as reason expands and guides his actions, motives are adduced to enlighten the fulfilment of this duty. But, at any period, it must be strictly insisted upon: the child who is once allowed to disobey his father and mother with impunity will one day cause them to shed bitter tears. Obedience to the will of a virtuous parent prepares for obedience to the will of God and to the laws of men; it fosters in him a sense of all his social duties, and hence leads to a knowledge of his rights. The fulfilment of our duties, and the enjoyment of our rights, are the double condition of our social existence and our happiness.

Affection and self-denial habitually exercised between parents and children, brothers and sisters, and joined to an earnest love of God, naturally glide into benevolence to all men. This ineffable sentiment—benevolence—will, under proper guidance, be an inexhaustible fountain from which will flow in rich abundance obligingness and disinterestedness towards others, humanity and

charity to those who suffer, indulgence for errors, forgetfulness of injuries, and greatness of soul.

3. *Individual Morality.*

Individual morality comprises a series of duties, virtues, and inclinations, which are equally indispensable to the formation of a perfectly moral character. Temperance, meekness, and love of cleanliness may be considered as the primitive acquirements on which the others of this series may be grafted. Temperance, the preserver of health, leads to moderation in desires, to the love of simplicity and occupation, to self-denial and self-respect.* Meekness produces resignation, patience, and fortitude, so indispensable to happiness in a state of society fraught with endless causes of vexation. Cleanliness, which, says Lord Bacon, "is next to godliness," begets moral purity, and leads to a love of order. Order, "Heaven's first law," is a great moral agent; it is the parent of prudence, industry, and good taste; it saves time, space, and money. It depends on those who preside over the moral development of the child to make him for life temperate or intemperate, meek or irritable, orderly or disorderly, as it depends on them to make him pious, submissive, veracious, affectionate, and benevolent.

Individual morality ought to be particularly cultivated in a child, with a view to his instruction; because the latter department of education, having for its object the exclusive benefit of the individual, depends, in a great measure, on the moral qualities which may secure his well-being, namely, diligence, industry, patience, perseverance, resolution, love of order, desire of improvement. Without the possession of these qualities, as a preparation for scholastic pursuits, there is no system of teaching which can avail, there is little prospect of ever arriving at eminence in any department of knowledge.

* The beneficial influence of temperance has been justly appreciated by Father Mathew, who, with all the energies of his inexhaustible benevolence, has, by its means, regenerated the Irish people, and raised their character. The moral reform which he has achieved, unparalleled in the history of human nature, has extended far among other nations, who, at this day, vie with each other in paying their just tribute of veneration and gratitude to the *Apostle of Temperance*

SECT. V.—OF PRACTICE IN MORAL EDUCATION.

The qualities which constitute *religious*, *social*, and *individual morality* must be obtained by proper example and exercise. Apprenticeship is as essential for acquiring benevolence, disinterestedness, prudence, and patience, as it is for attaining skill in any gymnastic feat or handicraft trade. The law of exercise is universal in its application. Moral precepts may be brought to the aid of practice; but, to be effective, they must be the generalisation of good and virtuous acts which have previously come under the notice of a child; otherwise they have no meaning. A precept of morality is an abstraction; and it is not by abstractions, by definitions, or by general principles, that virtue can be deeply inculcated in the hearts of children. Good habits, fostered by example, are the foundation of a truly moral education.

By dint of doing what is right, we at length find it difficult to do what is wrong. "Make sobriety a habit," says Lord Brougham, in one of his speeches in the House of Lords, "and intemperance will be hateful and hard: make prudence a habit, and reckless profligacy will be as contrary to the nature of the child grown an adult, as the most atrocious crimes are to any of your lordships. Give a child the habit of sacredly regarding the truth—of carefully respecting the property of others—of scrupulously abstaining from all acts of improvidence which can involve him in distress, and he will just as little think of lying, or cheating, or stealing, as of rushing into an element in which he cannot breathe."*

Socrates, according to his own confession, was naturally addicted to violence of temper;—Demosthenes laboured under natural impediments of speech and extreme nervousness;—the Czar Peter had an instinctive dread of going on the water: yet, by the force of the will and the formation of good habits, the first became the meekest and most virtuous man of his time; the second, the prince of orators; and the third, the best seaman of his empire. But what must be the power of exercise, when we see its influence over maternal love, a sentiment whose natural energy seems incapable of increase? It is an undeniable fact, that a mother's affection for her child is the greater as the act of nursing him, or the feebleness of his constitution demands

* *Sitting of the 21st of May*, 1835.

more care, and offers her more frequent opportunities of exercising her tender solicitude.

Practice, however, has its limits: a blind and excessive indulgence of *Self-love* would produce egotism; of *Sympathy*, weakness; of *Curiosity*, indiscretion; of *Conscience*, irresolution; and of *Will*, obstinacy. Excess in the moral acquirements would be equally injurious. Benevolence may instigate to generosity, at the expense of justice; a father may carry firmness to tyranny, and a mother the love of her child to blameable indulgence; blind patriotism may engender aversion for other nations. Whether we aim at the cultivation of faculties, or at the acquisition of moral qualities, excess and exclusiveness must be carefully avoided.

SECT. VI.—DUTIES OF GOVERNMENTS RESPECTING EDUCATION.

It is the sacred duty, as it is the noblest privilege, of parents to secure for their children, and to disseminate through society the benefits of moral education. But, among the numerous portion of the population whose life is consumed in incessant labours, and to whose industry, fatigue, and privations the nation is indebted for its wealth and power, parents are often deprived of sufficient leisure to watch over their offspring, or are destitute of the moral character indispensable for guiding them in the path of duty and of virtue; well informed educators should therefore supply their deficiency. A portion of the revenues of the state could not be better employed than in moralising and improving those who contribute so largely to them. An enlightened government ought to take secular education under its superintendence, and enforce it upon the people by legislative enactment.

Some persons object to this interference with parental authority and private speculation, as an infringement upon the liberties of the people; but they forget three things—first, that the child belongs to the state as well as to the family; secondly, that the great majority of parents are much in need of direction for the proper training of their children; thirdly, that the unavoidable influence for good or evil of the teachers over youth makes it imperative on the part of society to examine their qualifications, and superintend the discharge of their office, in order to secure the community from the dreadful consequences of ignorance or immorality on their part.

It may be inconsistent with liberty to force *instruction* upon

the people, as is done in some German states; because the kind of instruction best for individuals being a matter of opinion, it is neither just nor proper to impose any in particular, especially as that which is usually given in schools is often far from being the most available for the practical purposes of active life. It is undeniable that a vast amount of useful information, such, at least, as is required by the working classes, can be obtained without resorting to books; and although the state owes secular instruction to all, every one has a right to choose that which he thinks most conducive to his interest. But *moral education*, exclusive of religious distinctions, does not differ in kind with the social position and the future avocation of children. Morality is one and the same for all, and is imperative upon all: the tranquillity, the prosperity, the very existence of society depend upon it. We do not see how its being made obligatory, or how the right, on the part of the state, to institute, superintend, and inspect educational establishments, could interfere with the liberty of the people, any more than the obligation to pay taxes, refrain from dishonesty, or submit to the intrusion and inquisitiveness of excise and custom-house officers. The compulsory moralisation of the depraved is far more justifiable and more consistent with liberty than the compulsory detention of mendicants and the impressment of seamen.

Those who say that the right of interference would give the state the monopoly of public instruction, might as reasonably complain that tribunals have a monopoly of justice; magistrates, of the preservation of the peace; and licensed apothecaries, a monopoly of medicine. They should bear in mind that education is a social, not a parental question.

The competition in the supply of education bears no analogy to free competition in the supply of food and articles of dress: there is a greater demand for the latter two than for the former, because people have a more definite notion of what they want in the one case than of what is required in the other; and they can appreciate the qualities and value of material objects far better than they can those of moral and intellectual acquirements. Such competition, the source of progress in manufacture and commerce, is, in education, as in medicine, only the essence of charlatanism. It is the business of the state to create the demand for education, which the people could not of themselves make, and to see that those who speculate on that demand do not impose upon parents.

That legislative interference with national education is consistent with the respect due to parental authority and to private industry, is so manifest that the principle is carried out with general satisfaction in the United States, a country in which the rights of individuals and the liberty of conscience are more largely recognised than anywhere else. Plato and Aristotle, Washington and Jefferson, all staunch republicans, are among its warmest advocates.

The most eminent statesmen and philanthropists of Great Britain, struck with the fatal consequences they have under their eyes, arising from unprotected education, are now anxious to follow the general progress of modern nations towards moral elevation and intellectual advancement. "The voluntary principle has failed," said Sir Robert Peel, in supporting Lord John Russell's measure in favour of national education. "I believe if we could know the real extent of this evil; if we could have presented to us a full account of all the crime that has been generated by ignorance; if we could know what has really taken place within the last fifty years; if we could know how much the evil example of the parent has introduced infection into the character and disposition of the child; if we could know how much of violence and of rapine, how much of crime against both life and property has been caused by the neglect of education; if we could know how many immortal souls have, during that period, been ushered into the presence of their Creator and their Judge, ignorant of the great truths and principles of Christianity; I think, if we could know all this, we should be disposed to shudder at our own neglect, and to endeavour without delay to remedy the evils of the past." *

It is an abuse of terms to call the constraint which has for its object to secure to the people the blessings of moral and intellectual worth, an infringement on liberty. The declamation against the interference of the state in the education of youth is inconsistent and irrational, since the state has, within our own times, interposed its authority in the case of children employed in manufactories, and has, in many Chancery cases, claimed and asserted the right of removing the child wholly out of the power of the parent. Nay, it is absurd to object to legislative control, or even to compulsory education, under a pretence of liberty in a country in which distinctions of birth and religion create

* *House of Commons, sitting of the 22nd of April*, 1847.

privileges and exclusions so contrary to Christian fraternity and political equality, the essentials of social freedom.

The legislature of a free and civilised country is not only entitled, but is bound to adopt the most efficient means of preventing immorality from entailing degradation and barbarism on the nation. A Government which does not give moral education to the people has no right to expect from them order and support; nor can the law, consistently with justice, punish faults which have been committed in the absence of the moral consciousness which it is the object of good education to impart. In fact, the nearer to perfection and the more general education is, the less will the laws need to punish.

The venerable Von Tück, the present Head of the Orphan House in Potsdam, acting under the influence of this truth, has set to the world an illustrious example of self-denial and Christian charity. A nobleman by birth, and for fourteen years a judge in one of the courts of Prussia, he had, during his practice in this high office, to try so many criminal cases arising solely from the early neglect of the education of the culprits, that he at last felt reluctant to pronounce sentence of condemnation upon them; and, impressed with the sublime truth that the teacher who saves his fellow-creatures from committing crimes, does more good than the magistrate who waits for their perpetration to inflict punishment, he resigned his office, with all its honours and emoluments, to become an educator.

It is especially among that numerous portion of the people, the labourers and operatives, that moral principles should be early imbibed and virtuous habits formed. Their education should be sedulously attended to, with a view to their eternal salvation, to their worldly prosperity, to the security of person and property, and even to the advantages which the other classes of society will derive from it; because nursery-maids and all servants are recruited from among them, and on their morality, as well as intelligence, often depends the formation of the character and habits of children.

Reading and writing, now so generally and almost exclusively taught to the poorer class, are of themselves insufficient and ineffectual. They are, indeed, productive of infinite benefit to those who have time to turn them to use; but these arts are altogether unprofitable to those who, after the period of school, have no leisure to devote to them: because, differently from most other studies, the act of learning them is not even subservient to

mental discipline; it does not cultivate the higher faculties any more than manual occupations; it exercises the understanding less even than planing timber, or filing metal to a particular shape. It must not, then, be wondered at, if the children of the poor schools, in which the mechanical parts alone of reading and writing are taught, leave those establishments so deficient in intellectuality.

To the working classes, industrial and moral education would prove far more valuable than exclusive attention to reading and writing. The ultimate benefits expected from these two acquisitions cannot, in the present state of society, be calculated upon, dependent as they are on the accidental circumstances (rare among that portion of the people) of a love of reading and access to books. Besides, nearly all their time being taken up in earning a livelihood, they generally have little leisure to employ these arts to any advantage; so that, with the present system of elementary instruction, although they may acquire at school these instruments of knowledge, they remain all their lives deplorably ignorant of their duties as citizens and as Christians.

What this interesting portion of the community requires, in addition to reading and writing, and far more than these arts, of which they seldom avail themselves,—what they are entitled to, as a *right*, not as a *charity*, from the state, not from private benevolence,—is to be taught the means of gaining a livelihood, to have their minds unfolded and stored with the elements of knowledge, to be enlightened respecting their political rights, their duties to God, to society, and to themselves, and, finally, to be inspired with an earnest desire for intellectual and moral improvement. The interest of society and their own happiness require, above all, that they should be impressed with the conviction that virtue is infinitely superior to knowledge, and that *piety*, *justice*, *goodness*, and *wisdom* are the greatest blessings of education, and the acquirements most worthy of their ambition. (2.)

(2.) See Appendix.

CHAPTER III.

INTELLECTUAL EDUCATION.

SECT. I.—DEFINITION.

INTELLECTUAL education consists in two distinct objects—the cultivation of the intellectual faculties and the consequent acquiring of knowledge, otherwise called *Instruction.*

Hence, we see that instruction is only one of the subdivisions of education. The latter has for its object the perfecting of the whole man, considered physically, morally, and intellectually; instruction proposes solely to store his mind with information. Education is a *generic*, instruction a *specific*, term. These words, *education* and *instruction*, *educator* and *instructor*, must not be confounded one with the other.

The highest natural energy which the mental powers can possess, constitutes *genius;* every species of useful knowledge is a branch of *learning.* Genius and the whole circle of learning combined constitute *Intellectual Perfection.*

SECT. II.—INTELLECTUAL FACULTIES.

The intellectual, like the physical and the moral faculties, should be cultivated by exercises calculated to produce their greatest development, and tending to secure intellectual acquirements. It is on the external world, and through the medium of his senses, that the child can most profitably exercise his opening intellect. His sensations and curiosity constantly call his intellectual powers into play, while conscience and will direct their action. On the other hand, physical and moral life require to be guided by the light of intellect. Thus are the operations of the mind intimately connected with those of the body and of the soul. The different orders of faculties assist each other through the whole course of education; but, although the physical and moral development of the first and second periods subserves intellectual

education, this education is in full activity only from the third. It is, therefore, from the tenth or twelfth year only, that exclusively mental studies should be commenced.

The following table indicates the faculties of the mind, with the qualities which it is the object of education to cultivate in them :—

FACULTIES TO BE DEVELOPED.	QUALITIES TO BE CULTIVATED.
Attention . . .	Force, readiness, continuity, intensity.
Perception . . .	Acuteness, clearness, accuracy, rapidity, variety.
Conception . .	Justness, " " facility.
Memory	Retentiveness, recollectiveness, facility, fidelity.
Imagination . .	Vivacity, richness, originality, invention.
Judgment . . .	Rectitude, facility, readiness, soundness, vigour.

These faculties have for their common object the acquisition of knowledge, or instruction, constituting intellectual acquirements; each performs a particular office in the complicated mental process by which that acquisition is made. The possession of the various qualities of which they are susceptible would constitute an active and well-regulated mind—the greatest advantage which intellectual education can bestow. The instructor should then endeavour to secure that possession to the child, by a judicious and varied exercise of all his faculties, consistently with the various qualities to be cultivated. And, although it is almost impossible to attain to this high perfection, the efforts made towards it will not be lost; for intellectual excellence is usually in proportion to intellectual exertion. With a view to facilitate this object, we will examine what are the nature and use of these different faculties.

1. *Attention.*

Attention is the power of the mind by which the will directs the organs towards objects, in order to receive from them sensations, and from sensations, impressions, notions, or ideas. It is the most important of the intellectual faculties: through its means alone can the others be brought into action; without it the mind is powerless. The surest way, therefore, to succeed in cultivating and improving the other intellectual powers is to acquire a command over attention, and to give it a useful direction.

The force and continuity of attention are always in proportion to the interest excited by the objects which are submitted to its action. On the other hand, the intensity of the interest excited by anything is in proportion to the relations which it bears with our desires, our wants, and our well-being, as prompted by self-love, to the sympathies we feel for it, to the degree of curiosity which attracts us towards it, and to the energy of the will with which, in fact, it may almost be identified. Attention will then be invigorated by a suitable cultivation of the moral faculties, and especially of the will.

Attention, influenced as it is by the moral faculties from which it receives its impulse, forms another link between the moral and the intellectual energies. By reason of this very influence, it might, perhaps, be considered as a moral power; but as its action more particularly bears on the intellectual faculties, and contributes to their efficiency, we prefer placing it among them. However, it matters little how attention is classed, provided its importance in education be well understood.

This faculty, like all the others, when duly exercised, acts with readiness and energy, especially in reference to the objects frequently submitted to its action: a person may be very attentive to everything connected with his trade, profession, or favourite pursuit, who cannot, without difficulty, command his attention in other matters. Hence the necessity of properly directing this power in childhood.

The habit of general attention is the most favourable state of the mind for obtaining success in educational exercises, and in all the affairs of life: it continually directs the mind to what passes within the reach of the senses, and enriches the memory with all the facts which conversation and reading impart. Many persons complain of a want of memory; who are only deficient in attention. It is chiefly the inequality of attention which makes the difference observable between the intellectual powers of men.

Attention assumes the name of *observation* when it acts conjointly with the sense of sight; of *examination*, when it is successively directed to the parts of a whole; and of *investigation*, when it is directed to a series of connected facts. When it is withdrawn from the external world, and directed to the ideas treasured up in the mind, it constitutes the three acts of *thinking*, *reflecting*, and *meditating*, which differ only in their degree of intensity. *Comparison* is attention alternately bestowed on two or more things considered relatively to each other. These

different modes of attention must be early cultivated and rendered habitual; for they have, each, their peculiar sphere of usefulness in the acquisition of knowledge, and in the various concerns of life.

Attention takes the name of *abstraction*, when it is exclusively absorbed in the contemplation of one particular subject, of one part of a whole, of a property considered apart from the object to which it belongs. Such is the effect of abstraction, that, in concentrating all the faculties on one isolated fact, it multiplies their power as regards that fact, and deprives them of their action on what passes beyond its limits. The efficiency of this mode of attention in overcoming the difficulties of human pursuits, has given rise to the subdivision of labour in mechanical arts and to generalisation and classification in science.

The power of abstracting the mind from every subject but that immediately before it, is indispensable as a means of instruction. The more concentrated is the attention of the learner on one branch of knowledge, the more rapidly and the more thoroughly will he master it. If reflection and abstraction are directed with intensity and perseverance towards an object, they can effect more than natural genius; for, although this heavenly gift may emit sparks which reveal its existence, it will never, without abstraction and mental industry, produce anything great or durable. The men who have left after them anything worthy of our admiration, have generally been hard mental workers, and have directed their energy towards one particular object. We must, however, beware of keeping the attention of young people abstractedly engaged, for too long a time, on any one branch of study, for it is apt to engender indifference to every species of knowledge not immediately connected with that under consideration.

Abstraction, when unduly exercised, produces *absence of mind*, and must prove prejudicial to its possessor. It is not rare to see men so much engrossed with the objects of their pursuits, and so unmindful of everything else, that, in the affairs of life, they seem destitute of common sense. It was under the influence of intense abstraction that Archimedes ran naked through the streets of Syracuse, on discovering the specific gravity of bodies, while, in a bath, pondering over the problem of Hiero's crown. He afterwards fell a victim to his excessive indulgence in abstraction.

2. *Perception.*

Perception is the faculty which, through attention, renders us conscious of the impressions produced by external objects on the physical senses. It forms with attention a double link of that mysterious chain which connects the material world with the intellectual.

Immediate perception, or the act by which the mind acquires the knowledge of an object independently of the sign which represents it, is called *Intuition.*

The perception of external objects becomes the more acute, clear, and correct, as attention is more frequently and more intensely fixed on everything which comes within its sphere of action. If the mind does not attend to the objects of sensation, at the moment when they are presented to the senses, it remains unconscious of any perception, that is, receives no impression, and, consequently, preserves no recollection of it. Consciousness is, as it were, the act by which the mind registers impressions on the brain, and secures the power of recalling them; it is not a particular faculty, but, as Reid remarks, the general condition of reflective intelligence.

The perceptive faculty acts on the impressions which the nerves transmit to the brain, as the digestive power does on the food brought by the œsophagus into the stomach. These impressions, which are called ideas, or notions, constitute the elements of thought.

Perception brings into immediate contact the sensitive and the intellectual faculties of man. Its action is directed to the things the remembrance of which is to be preserved; and the knowledge thus acquired is direct, immediate, presentative, and of an intuitional character. Sensation being the primary mode of mental action, the exercise of the senses and the discipline of the perceptive powers form the first stage of intellectual education, as has already been adverted to in treating of the organs of sense.

This faculty has for its particular office to sow the seeds of knowledge and to lay the foundation of language; it furnishes the child with materials which give value to words; and leads to the acquisition of oral expression, by taking cognisance of the tones, looks, and gestures which accompany it. The notions acquired by perception are the original premises or primitive

ideas from which all others are inferred. Our assent to the conclusion being grounded upon the truth of the premises, we never could arrive at any knowledge by reasoning, unless something were known antecedently to all reasoning.

3. *Conception.*

Conception, or apprehension, as sometimes called, acts in the absence of objects, as perception does in their presence; it is exercised on intuitions and notions, not on things. The reflection which is directed to ideas assists conception in the same way as the attention which is fixed on objects assists perception. The knowledge obtained through the conceptive faculty is indirect, mediate, representative, and of a logical character.

This faculty takes cognisance of the mental world as perception does of the material world: we may conceive what has no existence, but we can perceive only realities. Hence, descriptions, definitions, and demonstrations may impart clear and just notions; but their correctness is commensurate with the correctness of those gained by perception. The exercise of conception increases the power of the understanding, as that of perception extends the power of reason.

As a means of instruction perception is preferable to conception; because ideas are necessarily more clear and more correct in the presence of the things themselves than in their absence. The first is the intuitive method, or instruction by experience; the second is the logical and explanatory method, or instruction through definition, demonstration, and oral or written testimony. The one is instrumental in acquiring the mother tongue, the other in acquiring a foreign language. This accounts for the difficulty which the study of a foreign idiom often presents, compared with the acquisition of the vernacular.

The fallibility of the senses and the narrow circle of individual experience do not permit man to obtain, through his own perceptive action, all the information which he requires; he needs the help of his fellow-creatures, not only in his physical relations, but in the development of the moral principles and the enlightenment of the mind. Individuals, families, nations are alike insufficient of themselves: their ideas become partial, their principles one-sided, their own feelings incomplete, apart from the rest of mankind. It is therefore desirable to cultivate the faculty which brings us into communion with other men, and

enables us, by the instrumentality of languages, to appeal to their testimony, and to appropriate traditional knowledge, whether conveyed by the living voice or the written page. When habits of clear and accurate conceptions are formed, the principle of traditional authority will powerfully aid individual reason in the discovery of truth and the progress of civilisation.

4. *Memory.*

The first three faculties, *attention*, *perception*, and *conception*, are, properly speaking, only the instruments of the other three, *memory*, *imagination*, and *judgment*. Memory treasures up the ideas communicated to the mind through their means; it gains all its energy from their development; and in its turn, becomes indispensable to imagination and judgment, as furnishing to them the materials on which they operate. And, indeed, we see that, in the progressive march of nature, memory precedes these two faculties, and predominates in childhood.

Memory may be subdivided into two powers—*retention* and *recollection*. The first retains impressions, the second recalls them when they are required for the purpose of communication or mental investigation. In studying a language, retention is exercised by due attention to the written and spoken expression, as it is impressed on the mind through reading and hearing; recollection is brought into action by giving expression, whether in speaking or writing, to the ideas treasured up in the mind. Memory will be efficient in proportion as it retains easily and indelibly, and as it recalls readily and faithfully what has been acquired.

The facility and power of retention, as well as the readiness and fidelity of recollection, are naturally very great in some individuals; but, however weak these qualities are in others, they may always, to a certain extent, be improved by exercise. The strength of memory is commensurate with the degree of attention bestowed on the object of study, and its aptitude is consistent with the habitual mode of action by which it is cultivated.

Attention succeeds in increasing the powers of memory by the *liveliness* with which it is exercised, by the *repetition* of its action, or the *continuity* with which it is kept up. The liveliness of attention, arising from novelty and surprise, is the most effective with children, as it suits the buoyancy of their spirits; repetition,

by affording intervals of relaxation and rendering impressions habitual, is powerful at every age; the third mode, continuity of attention, suits maturity best: the languor and weariness attendant on continuous attention in childhood sufficiently prove that it is not appropriate to that age; and yet, by a strange inconsistency, it is almost the only mode of exercising attention in schools.

The power of memory, which consists in readily recalling the ideas which it has acquired, results, in great measure, from their being so associated in the mind that they suggest one another. This association of ideas is the most singular property of the recollective power: it connects mentally two facts, or a series of facts, in such a manner that the thought of one spontaneously suggests all those with which it is associated. If, in a company, an apprehension of the unusual severity of the approaching season is expressed, an agriculturist will immediately think of the effect it may have on vegetation; a physician on that which it may have on health; a philosopher will reason about atmospheric phenomena; a young man will think of the winter sports, and a lady, of fur and velvet: thus the same idea may give rise to numberless chains of thought entirely different. It ought to be the object of a good intellectual education to direct and multiply these chains of ideas.

Association, or the law of suggestion, is of two kinds, accidental and necessary: accidental association is produced by contiguity of time or place, and by accidental resemblance or contrast; necessary association is that which exists between the cause and the effect, the premiss and the consequence, or which is founded on necessary resemblance. Although the memory which rests on the former kind of association is of an inferior character to that which rests on the latter, it is nevertheless of great importance to the child in whom it predominates. It is through the accidental association of the words he hears with the looks and gestures he sees, that, at his entrance upon social life, he is enabled to attach a meaning to conventional language.

As recollection of ideas depends, in a great measure, on the power of associating them, those associations should be carefully selected which bring ideas in closer contact. Necessary associations are, in this respect, preferable to accidental: they are not only more immediate, but are more firmly impressed on the mind, demanding, as they do, the co-operation of reflection and judgment; they may be recalled at will by a train of reasoning;

whereas accidental associations are not under the control of judgment, and can be retained only by repetition, or the force of the impression which produced them. The first kind is required for scientific investigations, and the second for descriptive and narrative purposes; the one is the usual resource of the philosopher, and the other of the poet, the novelist, and, especially, the gossip. Of the latter species of association Shakspeare gives a striking illustration, which has been often quoted:—

"What is," asks Falstaff, "the gross sum that I owe thee?"—"Marry," says the hostess, "if thou wert an honest man, thyself and the money too. Thou didst swear to me, upon a parcel-gilt goblet, sitting in my Dolphin-chamber, at the round table, by a sea-coal fire, upon Wednesday in Whitsun-week, when the Prince broke thy head for liking his father to a singing-man of Windsor: thou didst swear to me then, as I was washing thy wound, to marry me and make me mylady thy wife. Can'st thou deny it? Did not goodwife Keech, the butcher's wife, come in then, and call me gossip Quickly? Coming in to borrow a mess of vinegar, telling she had a good dish of prawns: whereby thou didst desire to eat some; whereby I told thee they were ill for a green wound? And didst thou not, when she was gone down stairs, desire me to be no more so familiarity with such poor people; saying that ere long they should call me madam? And didst thou not kiss me, and bid me fetch the thirty shillings? I put thee now to thy book oath; deny it if thou can'st."*

The association of ideas will receive valuable aid from the control gained over the will. This control or self-possession, by giving us command over the succession of thoughts, enables us to direct them to any point with steady attention, and to keep them, in argumentative discourses, fixed on the subject of consideration. The due culture of the will, respecting the association of ideas, should, therefore, in the educational course, be an object of primary and essential importance. All the advantages of a truly liberal education may be considered as incidental circumstances which, by evolving the varied powers of association, raise to its highest standard the intellectual character of man. Our improvement in science or in virtue, our success or happiness in life greatly depend on our habitual trains of thought. It ought to be the object of early discipline to form such habits as may secure these ends.

* *King Henry IV., 2nd Part.*

5. *Imagination.*

Imagination selects ideas, or trains of ideas, from the mass of those which have been collected by memory, in order to form new combinations, which may delight the mind and extend the intellectual sphere of man. Memory records the past, imagination embraces the past, present, and future; the former borrows, the latter creates; the character of the one is servility, its merit, fidelity; the character of the other is freedom, and its merit originality.

This faculty draws inexhaustible enjoyment from the activity of all the others and, in particular, of the powers of imitation and association, which are to man the primary sources of pleasure in the imaginative creations of genius. The charm, especially, which is attached to the fine arts, the offspring of imagination, arises from the imitation of nature and the association of ideas, which constitute their essence. To imagination, also, archæologists, antiquarians, botanists, entomologists, and all votaries of any art or science, owe the exquisite enjoyments which they find in their respective pursuits, and which are beyond the conception of other persons.

The imaginative faculty of young people will be enriched and cultivated by the contemplation of the beauties of nature and the wonders of art, by the recital of noble and generous actions, the biography of celebrated characters, the history of nations, the narrative of voyages and travels, the reading of the standard poets and historical romances, and by a due exercise of their powers of invention and composition. But in order to give to imagination a moral influence, it must be kept within the limits prescribed by reason and be directed to worthy objects; it must not be permitted to feed on those novels, so fascinating to young minds, which delineate fashionable vices and the indulgence of evil passions, rendered often the more dangerous by the glowing colours of their style. If it be allowed to wander among the fictitious images of riches, ambition, frivolity, or luxury, the judgment will be enfeebled, the attention withdrawn from the realities of life, and the mental powers forced into a false road which will lead to endless disappointment and moral suffering: an over-excited imagination often produces fanaticism and insanity. The pernicious influence of misdirected imagination will be greatly counterbalanced by the unfolding of the intellect

and the acquisition of knowledge. The judgment of the young should, therefore, be exercised in discovering truths, studying the nature of things, investigating causes and effects, and applying the lessons of experience to gaining an acquaintance with the human heart and with the real state of society.

When the mind is early familiarised with things remarkable for grace, beauty, and symmetry, their images remain vividly impressed on the memory; and by thus affording to the imagination suitable objects of exercise and ready models of comparison, refinement of taste and a love of order are imperceptibly formed, which are sometimes mistaken for natural gifts.

Imagination can, by a proper direction, contribute to the culture of all amiable and virtuous qualities: it stimulates the action of sympathy, even in the absence of the object capable of exciting it; its magic power puts us in the place of others—to know their wants, enter into their feelings, and share in their joys or their sorrows. It makes us derive pleasure from the indulgence of the affections. Deprived of imagination, we should practise benevolence and charity as mere instincts, with coldness and indifference.

6. *Judgment.*

Judgment embraces the relation between things, or the qualities by which they are distinguished: we judge when we perceive resemblances and differences between objects and between their qualities. Judgment is the last faculty which manifests itself, because its action depends on the exercise of the others: it may be cultivated the more easily, and will become the more sound and clear as attention observes more facts, as perception and conception convey more ideas to the mind, as memory has retained and imagination combined more materials of thought.

A series of judgments forming a chain of successive and immediate consequences, constitutes *reasoning;* this name is, therefore, given to the power of drawing such inferences as necessarily flow from given principles. Reasoning is either *inductive* or *deductive.* By induction we rise from the knowledge of a number of individual facts to a general truth, from the example to the rule; or, in other words, we infer, respecting a whole class, what has been ascertained respecting one or more individuals of that class, By deduction we unrol particular facts from a general truth; we show that a certain fact is the application of a certain law.

Induction is anterior to deduction, as we must reason from the facts collected by perception up to principles before we reason from principles. These two modes of reasoning may be said to go hand in hand, the one verifying the conclusions deduced by the other. The science of mechanics presents a remarkable instance of their combined action. They have given rise to two opposite methods of instruction—*analysis* and *synthesis*. The synthetical or deductive method of reasoning is principally confined to the exact sciences: but the analytical or inductive method has a more extensive application; it forms the basis of reasoning in the common affairs of life and the acquisition of experience; it guides us in the study of languages and in all experimental and speculative investigations. Physical science is based upon inductions drawn from observation of the world without, and metaphysical science upon inductions similarly drawn from reflection upon the world within.

Analogy, the source of induction, is the act of judgment by which we discover the conformity which exists between things. It is analogy which represents natural effects by onomatopœia, deduces metaphysical terms from the names of sensible objects, multiplies the expression of thought by the inflections and arrangement of words, adorns discourse by imaginative conceptions; or, in the imitation of nature, modifies her forms and colours; in a word, it is the exhaustless source from which springs everything that is beautiful in language or the arts. Analogy is especially the light of language—it presides over its formation; facilitates its intelligibility, use, and acquisition. When custom is doubtful, analogy decides.

Tracing analogies is the first exercise of the judgment, and the kind of reasoning best understood and most practised by children. The frequent opportunities which they have of applying this mode of reasoning in acquiring their own language, make it so instantaneous an act of the mind, that, for the most part, it remains unnoticed. It is by the errors into which the irregularities of language often lead them, that the correctness of their judgment, in this respect, may be observed: they hear *houses*, *liked*, *greater*, *fattest*, and will imitate these forms in other words,—saying, by analogy, *mouses*, *striked*, *gooder*, *baddest*. This mental operation is very valuable in instruction, and especially in the acquiring of language; in fact, without analogy, it would be utterly impossible to suit the forms of expression to the ever-varying circumstances of social and intellectual life. By analogy

we pass from the known to the unknown, and thus extend the sphere of our knowledge. Socrates founded his method of teaching chiefly on analogy.

Generalisation is another act of the judgment, which forms an essential element of induction. By its means we classify individual truths under general propositions, and are, thereby, aided in retaining them and fixing their mutual relations. By abstraction we consider one property common to many objects; by generalisation we bring together the various objects which possess that property. Generalisation is therefore dependent on abstraction: there may be abstraction without generalisation; but there cannot be generalisation without abstraction. The powers of abstraction and generalisation should be carefully cultivated, as they aid in the analysis of thought and contribute to the correctness of the judgment. They preside over classifications, which form the basis of all sciences, especially of the inductive, and considerably assist the memory in all the departments of knowledge. These powers act a prominent part in the acquisition of language; for the clear comprehension of generic and specific terms, which constitute the great bulk of its nomenclature, entirely depends on the classification of things into genera, species, and individuals.

As the deficiency or absence of one physical faculty leads to a greater exercise and consequent development of the others, so the weakness of one of the mental powers leads to an increase of energy in the others. Hence, persons deficient in memory, usually endeavouring to supply that deficiency by the exercise of reasoning, often surpass in abstractive powers and intellectual acquirements those who, being endowed with greater facility of memory, employed, in their youth, this faculty to the prejudice of the others.

Exercise renders the reasoning process so rapid, that we draw conclusions, as it were, intuitively, without feeling conscious of the chain of ideas by which the mind has arrived at them. When the power of judging and reasoning rightly arises really from intuition, and is applied to the common affairs of life, it takes the name of *good sense*, an expression which, although bearing some affinity to *understanding* and *reason*, must not be confounded with them. These latter terms are of higher import: they both imply the combined action of the mental powers; but *understanding* is more particularly the capacity of logical reasoning, whereas *reason* is essentially the power of intuition. Logical acuteness,

or a capacity for reasoning out principles, is the characteristic of a good understanding; a vivid natural aptitude for the discovery of truth independently of patient ratiocination is the charactistic of reason. However, the fallibility of individual understanding and reason renders an appeal to either insufficient as a test of truth: hence, tradition and the testimony of mankind are usually regarded as principles of appeal superior in authority. Trust in human tradition and testimony is so universal, that private judgment may, for the greater part, be tried and tested by the tone, the convictions, the general consciousness of the age in which we live: individual reason is, after all, but a portion of universal reason.

Sound judgment assists moral education by enabling man easily to distinguish good from evil. It prompts him to regulate his conduct according to the various situations in which he may be placed. It produces tranquillity of soul; for it guards against violent emotions, by the mental habit of bestowing in all things the attention which they deserve, of considering them in their true light, and estimating them by their just value. Without rectitude of judgment, man is a slave to prejudice and passion; his memory only exposes his folly; his imagination and sympathies continually lead him astray; his habit of observation multiplies his errors; his spirit of invention and discovery causes his ruin; his reasoning, although it may be logical, by starting from wrong premises, brings him to false conclusions. Even moral qualities often become dangerous when unaccompanied by sound judgment: courage degenerates into rashness, indulgence into weakness, frankness into indiscretion, economy into avarice, and religion into superstition or fanaticism.

The intellectual faculties exist originally in all men; but they, not less than the physical and moral, vary in every individual in quality and degree of activity, each giving rise to a variety in consciousness, aptitude, and capacity. Some persons are endowed with greater powers of perception, and others of conception. In some, memory predominates; in others, imagination; and in others, judgment; in many, sensation prevails over reason. One individual receives clearer ideas from sensations of sight, another from those of hearing, and so forth; as the eye, the ear, or the other organs are naturally more active or correct. Some memories retain facts better; others, places; others, words; others, tunes, &c., according to the peculiar energy of the perceptive powers which take cognisance of these different classes of objects.

Imagination is in one person more inventive, in another more imitative; some are prone to deductive, others to inductive reasoning. These differences among men are again indefinitely multiplied by the reciprocal influence which the different orders of faculties have over each other: the predominance of certain moral faculties modifies the course of ideas, as the predominance of certain intellectual faculties modifies the affections and inclinations. Hence, the diversity of taste, or genius, as it is called, which is early manifested for different pursuits. The infinite variety of nature, in physical complexion and outward form, is but the symbol of that which marks the spirit within.

This remarkable diversity of dispositions and abilities, which is again wonderfully increased by the different exercises to which the faculties are subjected in the varied circumstances of life, and in the different processes of education, is one of the greatest boons which an all-wise and all-bountiful Providence has conferred on social man. With our limited powers, and the immensity of nature before us, moved as we are by different impulses, we attend to different objects, and thus benefit the whole race of mankind by bringing to the mass each individual acquisition. How dull and monotonous would existence be, and how limited and slow the progress of civilisation, if all had the same inclinations, the same pursuits, the same opinions, the same acquirements, and the same mode of life. (3.)

SECT. III.—INTELLECTUAL ACQUIREMENTS OR INSTRUCTION.

The second part of intellectual education—the acquisition of knowledge—embraces all nature. There exists nothing, from the imperceptible atom to the most sublime object in creation—from the simplest phenomena of our existence to the impenetrable mysteries in which the Divinity is veiled—that man does not desire to know, or does not make an object of serious study.

Such are the wise provisions of the Maker of all things, that not only are the external world and its relations to our constitution so arranged as to hold forth to us every inducement to cultivate our faculties, but the very acquiring of knowledge is the most efficient means by which those faculties can be cultivated and improved. Instruction is the natural nourishment of the mind, and is as necessary for its growth as food is for that of the body.

(3.) See Appendix.

Intellectual acquirements have been for a long time the sole object of education; but of late the cultivation of the faculties has, on account of its greater importance in childhood, been exclusively recommended by some educationists. The right course lies, we think, between these extremes; the two departments of intellectual training should always be combined.

The acquisition of knowledge and the development of the mental faculties lend to each other reciprocal assistance; for, if the mental activity which is employed in the study of any branch of instruction invigorates the faculties, a high intellectual development must, on the other hand, considerably facilitate the acquisition of knowledge. It is by devoting an equal attention to these two points that the end of intellectual education will be gained, that we shall secure to our children inexhaustible sources of enjoyment, means of success in their respective professions, the power of being useful to others, and an honourable place in society.

"Knowledge is power," says Bacon; it may be added, knowledge is happiness; for it is only another name for truth, the discovery of which is the object of every study. What pleasures can equal those which flow from this heavenly source? The pursuit of science and literature presents an extensive field of enjoyment in a life of leisure, and of relaxation in a life of business; it cheers the gloom of solitude and the dreariness of sleepless nights; it braves the severest trials of fortune, and alleviates the heaviest affliction. The habit of intellectual industry and patient perseverance which it creates, tends to bring the bodily appetites under the subjection of mental power, and supplies healthy stamina to the growing mind. Every new step made in the pursuit of knowledge ennobles the mind, and brings it nearer to its divine archetype.

> "Ignorance is the curse of God;
> Knowledge, the wing wherewith we fly to Heaven." *

The possession of knowledge divests us of the prejudices which necessarily result from the ignorance incident to our nature; it elevates us above human weaknesses and vulgar propensities; it attaches us to our fellow-creatures by the facility which it affords of serving them; it subserves morality by calming the effervescence of the passions, and creating habits of serious con-

* *Shakspeare, King Henry VI., 2nd Part, Act 4.*

temptation; finally, it furnishes new motives for pious adoration by enabling us to perceive the power and wisdom of the Creator in His works, and to appreciate His infinite goodness in His revealed Word.

Learning, confined for a long time to Greece and Rome, where it was often more fertile in vain reasonings and in visionary systems than in useful results, afterwards remained for ages buried in total darkness. It may be said to have but lately emerged from oblivion to shine with new splendour over the modern world. At the present time science is pregnant with practical benefits; it daily gives birth to inventions and discoveries which add to the comforts of life and to the progress of society: intellectual capital contributes as much as material capital to the wealth of nations. Navigation, commerce, printing, the application of steam to manufactures and modes of conveyance, and the electric telegraph, by promoting social intercourse and the exchange of thought, advance still further the cause of civilisation.

The diffusion of knowledge among all classes would be the best security for maintaining the public liberties, as it is the surest way of advancing national prosperity. A well-informed people, who know and value the rights which God and their country have given them, can never be enslaved. The more enlightened we are, the more free and the more worthy of liberty. This heavenly gift is only a name, if those on whom it is bestowed are, from want of due instruction, unconscious of the rights it confers. Intelligence is the pre-requisite of freedom; and unless a liberal system of national education extend to the enfranchised millions an ability to exercise with judgment their political rights, the people must still, we fear, remain, as they have long been, the instruments, the dupes, the victims of presumptuous or unprincipled ambition.

In this respect some of the monarchies of Germany have done more for true liberty than England with all her boasted political institutions: they have raised the character of the people by a liberal education; whereas in England the moral and intellectual improvement of the poorer class is abandoned to charity and to proselytism. The unreasonable assumption, too, of birth and wealth on the part of the aristocratic proprietors of the British soil, and the prostrate condition to which ignorance and poverty, the parents of subjection and servility, have reduced a large portion of the population, especially in Ireland, form a contrast

destructive of Christian fraternity and genuine liberty. In an enlightened and free community, there should exist no recognised superiority but that of virtue, knowledge, abilities, and industry; no privileges but those to which national services are entitled. The freedom of a people, as well as their preponderance in the scale of nations, will, henceforward, depend on their moral and intellectual character more than on their warlike dispositions or the political skill of their rulers.

SECT. IV.—CLASSIFICATION OF KNOWLEDGE.

In order to facilitate the acquisition of knowledge, it should be classified according to the faculties on which its different branches more particularly depend.

The branches of information which chiefly call for the exercise of *memory* consist in the simple record of the things and facts which the first two faculties, *attention* and *perception*, bring under the cognisance of the mind. The study of them is only an act of the memory which collects known truths; hence they may be classed under the name of *Histories*.

Those which depend on reasoning are acquired by starting from known things and facts with a view to arrive, by a series of inductive or deductive arguments, at such as are unknown: the object of any train of reasoning is the elucidation of known truths, or the discovery of those which are unknown. When the truths which we investigate are universal, immutable, and linked in a chain of ratiocination, they constitute what is called a *Science*. It is the purport of science to lay down general principles.

The application of the truths retained by memory, or discovered by reasoning, to the practical usages of life, whether for gratification or well-being, constitutes a third series of information, which takes the name of *Art*. An art is therefore the practical realisation of thought—the application of general principles to particular facts. This name is also given to a collection of fixed and general rules, which serve to guide us in that application.

This third class of acquirements demands the action of the physical organs for their execution, whilst the principles on which they rest are within the sphere of the intellectual powers. The knowledge of these principles is of great assistance to carry the arts to their highest degree of perfection. He who practises an art without the knowledge of the principles on which it is

founded will never be anything but a simple mechanic; he cannot pass the narrow limits of routine, or surmount difficulties as they present themselves.

The arts which imagination creates by imitation and analogy contribute to the luxury and enjoyment of intellectual life; they exalt the mind by extending its sphere of action above common nature. Such is the object of the *fine arts*.

The arts are said to be *liberal* when the action of the moral and mental faculties predominates in their execution, and *mechanical* when they chiefly depend on the physical faculties, or when the habit of execution in them dispenses with the action of the reasoning power.

Memory, reasoning, and imagination are then respectively exercised on three different classes of knowledge, *histories*, *sciences*, and *the arts*; for, although all the mental powers take a share in the study of every branch of knowledge, yet each of these three faculties predominates in the class which we have assigned to it.

History, science, and art may be classified each into three departments, according as they relate to *nature*, to *man*, or to *language*. These three departments embrace all the information which may become an object of human consideration. The three following Tables indicate the general branches of knowledge, classified in reference to the respective faculties principally engaged in acquiring them :—

INTELLECTUAL EDUCATION.

MEMORY.

OF BEINGS AND OF THINGS.		*OF PLACES, OF FACTS, AND OF DATES.*		*OF WORDS AND PHRASEOLOGY.*	
HISTORY OF NATURE.		HISTORY OF MAN.		HISTORY OF LANGUAGE.	
Animate.	*Inanimate.*	*Local.*	*Chronological.*	*Example.*	*Precept.*
Zoology—	Geology.	Voyages and travels.	Sacred history.	Prose—	Lexicography.
Mammalogy.	Physical geography.	Geographical discoveries.	Ancient profane history.	Narrative	Grammar (art).
Ornithology.	Hydrography.	Historical geography (ancient and modern).	Modern profane history.	Descriptive	Etymology.
Ichthyology.	Uranology.	Archæology.	Biography.	Didactic.	Philology.
Entomology.	Botany.	Civilisation.	Chronology.	Poetry—	Logic (art).
Erpetology.	Mineralogy.	Statistics.	Numismatics.	Lyric	Punctuation.
Conchology.			Ethnography.	Epic	Rhetoric.
Zoophytes.			Mythology.	Dramatic	Prosody.
				Pastoral	Versification.
				Satirical.	Elocution.
LEAD TO *Natural Sciences.*		LEAD TO *Sciences of Society and Government.*		LEAD TO *Sciences of Ideas and of the Mind.*	

INTELLECTUAL EDUCATION.

REASONING.

NATURAL SCIENCES.			*SCIENCE*	METAPHYSICS.		
Pure Mathematics, or Exact Sciences.	*Mixed Mathematics, or Natural Philosophy.*	*Experimental or Physical Sciences.*	*of Society and Government, or Political Science.*	*Science of Ideas and the Mind.*	*Science of God and the Soul.*	*Science of Good and Evil.*
Arithmetic. Algebra. Geometry. Trigonometry. Analytical Geometry Differential and integral calculus. Conic sections. Practical Mathmtcs. { Surveying. Navigation. Fortification.	Mechanics. Hydraulics. Optics. Perspective. Astronomy. Gnomonics. Pneumatics. Acoustics. Hydrostatics.	Chemistry. Electricity. Magnetism. Meteorology. Anatomy. Physiology. Pathology. Phrenology.	Politics. Political geography. Political economy. Legislation. Jurisprudence. Calculation of probabilities.	Logic (science). Grammar (science). Mental philosophy, or ideology. Education.	Theology. Psychology.	Ethics, or moral philosophy.
LEAD TO			LEAD TO	LEAD TO		
Learned professions. *Military professions.* *Industrial professions.*	*Mechanical professions.* *Naval professions.*		*Administrative and speculative professions.*	*Learned professions.* *Literary professions.*	*Pedagogical professions.* *Ecclesiastical professions.*	

INTELLECTUAL EDUCATION.—IMAGINATION.

FINE ARTS.		
Imitation of Nature.	*Imitation of Man.**	*Imitation of Language.*
Drawing.	Vocal music.	Reading.
Lithography.	Instrumental music.	Declamation.
Painting.	Dancing.	Dramatic performance.
Engraving.	Pantomime.	Conversation.
Modelling.		Improvisation.
Carving.		Poetry.
Sculpture.		
Architecture.		

The order to be followed in the acquisition of learning, as indicated by the three foregoing Tables, is conformable to the order established by nature in the successive manifestation of the intellectual powers. And, although the various departments of knowledge admit of being classified under different heads, they are all connected by innumerable and imperceptible links which render them an assistance to each other. Thus, historical information, which depends on memory, leads directly to scientific and to artistical information, which depend on judgment and imagination.

The history of nature leads to the natural sciences and to the imitation of nature; the history of man leads to the science of society or of government; the history of language to the science of ideas and of the mind, as well as to the fine arts, which have for their object the expression of thought and feeling. †

The sciences, in their turn, assist in engraving on the memory the information acquired by that faculty, and serve as a foundation for the various professions of social life; for we must not forget that the principles of all the arts spring from the truths

* We have been induced to class *music* and *dancing* under this head, because the modulations of the one and the movements of the other bear a close affinity to the passions and emotions of the soul. If people enter so quickly into the impressions conveyed by them, it is because these impressions are in harmony with their own feelings and mode of existence.

† The word *history* means here the record of the facts of language, its words and phraseology, as found in the works which constitute the various branches of its literature. This application of the word *history* is analogous to the sense which it bears in the other two cases.

ascertained by the testimony of the senses or by the power of reasoning.

The natural sciences lead to the learned, military, industrial, and practico-speculative professions. The sciences of society and government lead to administrative professions, the science of language and of ideas to literary professions, the science of God and the soul to the ecclesiastical profession. Mental and moral sciences combined lead to the educational profession.

The arts derive powerful means of improvement from the sciences; and, *vicē versâ*, the principles of science are rendered more clear and interesting by their application to the arts. This reciprocity of influence shows the propriety of introducing in education the practice of such arts as may bear some relation to the intellectual studies and the future destination of young persons.

SECT. V.—OF THE FITTEST INSTRUCTION FOR YOUTH.

The various branches of knowledge have latterly been so multiplied that it is impossible for a single individual to embrace them all; and some sciences have been carried so far that it almost requires the exclusive exertion of a long life to reach their utmost extent:—

> "One science only can one genius fit,
> So vast is art, so narrow human wit." *

However, if the immense variety of arts and sciences does not permit short-lived beings, such as we are, to possess them all, their admirable connection, by aiding the memory, furnishes us with an easy means of acquiring an extensive portion of them. We should principally aim at those which suit our particular station or profession in society, and at those also which are calculated efficiently to improve our faculties. This is the most certain way of being happy ourselves and useful to others. The first of these two objects is based on the second; for we can be truly happy only in so far as we have it in our power to serve others. "The predominance of philanthropic and generous ideas," said Napoleon, "ought to be the character of the age." †

The period of education being, for the great majority of young persons, restricted within narrow limits, it becomes the more indispensable, in a rational system of public instruction, to

* A. Pope. *An Essay on Criticism.*

† *Réponse à une Députation du Corps Législatif.* 12 Pluv. an. 13.

confine the objects of study to such branches of knowledge as best discipline the intellect and are of practical utility through life. The information most required by individuals varies indefinitely with their diversified pursuits in social life; but that which offers the best prospect of being useful in all situations, and which should have the precedence over the others is, we think, an acquaintance with the laws of nature. True knowledge is, in fact, nothing but the interpretation of nature. In nature may be found all the elements of our ideas, all the principles of our sciences, all the models of our arts, and endless sources of moral and religious sentiments.

The physical sciences, which have for their object the investigation of the natural laws, are suitable to the different periods of youth, and are useful to all classes of people; they exercise the perceptive powers, enrich the memory with facts and words, excite and gratify imagination to the highest degree, prompt to investigation, and inspire a taste for learning. Although they are not, perhaps, the best calculated for making profound reasoners, they are far from materialising instruction, as affirmed by some persons; they cultivate effectively the moral and the intellectual faculties; no literary composition engages the moral feelings and religious sense more vividly than the grandeur and perfection of the material world; none exercises the judgment more usefully than the application of analysis and induction to the phenomena of nature.

Secular Instruction ought chiefly to consist in initiating a child into the natural laws, showing him their relation to his being, and teaching him to obey them and avail himself of them in order to secure his happiness and usefulness. George Combe, in his work, "The Constitution of Man," has forcibly demonstrated and illustrated the relations in which we stand to external nature. He has shown that, while the natural laws act independently of each other, there is in their combined action a pervading principle to reward virtue and punish vice, and that the world is, throughout its constitution, framed in perfect adaptation to the faculties of man as a moral, pious, and intelligent being. The study of nature, presenting endless illustrations of the sacred volume, renders instruction the hand-maid of religion.

The lower animals, under the influence of instinct, blindly follow the course which unerring Wisdom has marked out for them; man alone has the discretionary power of conforming to

the laws of nature or transgressing them, according as he is, or is not acquainted with them : in resisting them, he abuses his intelligence and liberty, and these valuable gifts become fatal to him ; in obeying them, he, on the contrary, is enabled to avoid almost all the ills of life. A knowledge of nature is, therefore, indispensable, in order to enable him to act consistently with his destination.

The intimate relations which exist between external nature and the human constitution render the latter an indispensable subject of study in connection with the former. Man should know his own organisation, physical, moral, and intellectual, to be able to understand what are his duties to God, to society, and to himself, because he is framed in perfect adaptation to these duties. This comprehensive study of man, which, under the name of philosophy, embraces his relations with the universe, and all investigations respecting primary and final causes, would make us better acquainted with the Author of nature, with His laws, His commands, and all the great moral and intellectual truths. Should it not lead to this knowledge, it would be unworthy of our meditation, and ought not to enter into the circle of academic studies. Religion and philosophy should concur to the same end.

If we now consider knowledge as an instrument for unfolding the powers of the mind, it must be admitted that, although no particular department of study possesses the privilege of exercising them all, some are more than others conducive to this object. In this respect, classical, philological, and philosophical studies seem to claim preference as the fittest for effecting an harmonious development of the intellectual energies most required in active life.

Mathematics, far from being, as commonly believed, the best logical discipline, would, if studied exclusively, rather tend to disqualify the mind for general reasoning. They confine the student to a narrower circle of mental exercises than languages and philosophy : they habituate him to a routine of demonstration which presents little variety ; they awaken his judgment to a relation of quantity, neglecting quality and all other important relations. They do not call forth the intellectual powers most useful under all circumstances, such as observation, comparison, generalisation, classification, induction, analogy, which may all be brought into activity and invigorated by the study of languages and philosophy.

In every step in mathematical demonstrations, there is a constant perspicuity, a straight and limited path marked out, from

which it is almost impossible to wander. But, in attending to philosophical, ethical, or literary investigations, the learner has to feel his way, reflect, compare, judge, apply his own experience, weigh probabilities, disentangle net-works of inconsistencies, and lay bare sophistical plausibilities. In this necessity for a diversified and complicated action of the reasoning powers consists the chief value of literary and philosophical studies.

The precision of mathematical expression affords no example of those fallacies which so frequently arise from the ambiguities of ordinary language; nor does mathematical demonstration allow room for sophistry of thought, or for the consideration of improbabilities; because its matter always enforces the correctness of its form and the certainty of its conclusions; the exact sciences do not consequently provide means of detecting and avoiding logical errors. Hence it is that mathematicians are not unfrequently led to one or other of two opposite extremes—*credulity* or *scepticism*.

"The cultivation afforded by the mathematics," says Goethe, "is, to the highest degree, a one-sided and contracted question." * Nay, Voltaire does not hesitate somewhere to affirm, "Geometry leaves the mind where it finds it." † Franklin also has clearly and explicitly expressed his particular aversion for mathematicians, as he found them in the intercourse of society "insupportable from their trifling and captious spirit." "All that goes," observes Bishop Huet, "to the formation of those brilliant minds to whom has been conceded, by privilege, the title of *beaux-esprits*, —I mean copiousness, variety, freedom, readiness, vivacity,—all this is directly opposed to mathematical operations, which are simple, slow, dry, forced, and necessary." ‡ "There are four celebrated metaphysicians," observes also Condillac, "Descartes, Malebranche, Leibnitz, and Locke. The last alone was not a mathematician, and yet how greatly is he superior to the other three." §

These observations are corroborated by the testimony of the most competent judges, besides the few just mentioned—Bernhardi,‖ Weiler,¶ Klumpf,** Wolf,†† Basedow,‡‡ Niemeyer,§§

* *Briefwechsel zwischen Goethe und Zelter*, 1833. † *Siècle de Louis* XIV., ch. 29.
‡ *Huetiana*, ch. 123. § *Œuvres Philosophiques*, t. vi.
‖ *Thoughts on the Organisation of Learned Schools*, 1818.
¶ *Annual Report of the Royal Institute of Studies, Munich*, 1822.
** *Learned Schools according to the principles of genuine humanism*, 1829.
†† *Kortum: Wolfs Leben der Philologen*, t. 1. 1833. ‡‡ *Philalethie*, Bd. ii. § 179.
§§ *Ueber Pestalozzi*, 1810.

D'Alembert,* Descartes,† Pascal,‡ Destutt-Tracy, § Berkeley,‖ Warburton,¶ Walpole,** Gibbon,†† Dugald Stewart,‡‡ and many others, whose opinions have been recorded by a late writer, in an able dissertation on the subject.§§

Mathematics, unlike literary studies, afford no scope for display of language, or argumentation, because their vocabulary is extremely limited and their logic restricted to few and particular formulas. The simplicity and uniformity of reasoning to which they subject the mind are such, that the argumentation and language of the last page of Euclid are nearly identical with those of the first page. The truths which they proclaim admit of no controversy or speculation, and cannot well be made a subject of conversation in the ordinary intercourse of society. They, in fact, supply no means of improvement in the expression of thought, the most important of all intellectual acquirements.

Those who have been exclusively engaged in the exact sciences, accustomed to follow a train of deductive reasoning, and to draw conclusions from fixed principles and from data passively received, are liable to err from limited observation and disregard of undemonstrated truth; they require mathematical proofs in everything, and are apt to reject moral or probable evidence, although propriety of conduct and justness of opinion, in most of the affairs of life, chiefly rest on such evidence. "Nothing," says Madame de Staël, "is less applicable to the business of life than a mathematical argument."‖‖ But, in the study of languages, the understanding is engaged as in the world: we find in both the same dealing with words and ideas, the same caution and discrimination between rules and exceptions, the same mixed relations and contending principles, the same exercises of conception, imitation, and invention: finally, the same methods of induction, analogy, and analysis.

Language cultivates the imagination and taste, on which mathematics exercise but little influence; by the unlimited range of its applicability, it tends to store the memory, enlarge the capacity, and expand the views of the student; whereas mathematics, being confined to a smaller circle of subjects, contract the

* *Mélanges*, t. iv. † *Vie de Descartes, par Baillet.* ‡ *Pensées.* Part I.
§ *Elémens d' Idéologie. Principes Logiques*, ch. ix. ‖ *Analyst. Querist.*, 38, 39.
¶ *Julian. Preface Works*, t. iv. ** *Walpoliana*, t. i., clxxxii.
†† *Memoirs of my Life and Writings.*
‡‡ *Elements of the Philosophy of the Human Mind.*
§§ *Edinburgh Review. No.* cxxvi. ‖‖ *De l'Allemagne*, t. i., ch. 18.

intellectual powers within a comparatively narrow compass. But the benefits arising from the study of languages need not be dwelt upon now, as they will be minutely detailed hereafter: it may suffice, in concluding, to adduce an opinion of great weight on this subject. "It is proved," says M. Guizot, "that the study of ancient languages is the most moral, the most civilising system of instruction, the most conformable to the nature of social relations and to the laws of the human mind. The more the language we study is exact, delicate, rich, elegant, and elaborate, the more benefit will this study confer on the mind, which thus acquires in its own activity more accuracy, delicacy, richness, and elegance."*

Although the value of classical and literary studies, considered exclusively as instruments of intellectual cultivation, is greater than that of mathematics, no one can deny the usefulness of the exact sciences as elements of professional instruction, or dispute the expediency of leaving them as co-ordinate to find their level among the other branches of a liberal education. Not only are they the ground-work of mechanics, astronomy, optics, navigation, land-surveying, and other sciences, but, although restricted in their mode of argumentation, they tend to complete the cultivation of the reasoning powers, by the synthetical and exact process through which conclusions are deduced from their principles. They add to man's power as a thinker, and, hence, as a speaker and a writer. Besides, the more diversified the ideas which the mind acquires, and concerning which it reasons, the more expanded will be its capabilities. "No education," says Dr. Whewell, "can be considered as liberal which does not cultivate both the faculty of reason and the faculty of language, one of which is cultivated by the study of mathematics, and the other by the study of the classics. To allow the student to omit one of these is to leave him half educated."†

SECT. VI.—FOUR DEGREES OF INSTRUCTION CORRESPONDING TO THE FOUR PERIODS OF YOUTH.

Intellectual education ought to be carried on progressively and with due regard to the age and future prospects of the child. But although, in these respects, it resembles physical and moral education, its relative value in the four periods of youth follows a different order of progression. Intellectual education is important in direct proportion to the age of the child; moral and

* *Rapport sur l' Instruction Secondaire. Exposé des Motifs.* 1836.
† *The Principles of English University Education.*

particularly physical education are valuable in an inverse ratio: in other words, intellectual education accomplishes most in the fourth period, whilst the other two are more beneficial the earlier they are commenced.

Reflection and judgment are not, in the first period, sufficiently developed to take an active part in the instruction of the child. It is through the perceptive and the imitative faculties that he can, during that period, be given elementary notions of things and of language, these being inseparable. However, at his entrance into life he should not so much be taught lessons as be formed to those moral and religious habits which are the best preparation for future intellectual education. This preparatory training, or first degree of instruction, is the work of good domestic government, or of infant schools.

In the second period, by means of a moderate and progressive exercise of all the intellectual powers, the child must be familiarised with the external world and the phenomena of nature; he must be accustomed to examine everything, and be made to observe the order, wisdom, and infinite goodness which have presided over all the details of Creation: thus he will, by appropriate conversations on these subjects, gain an extensive practical knowledge of the native tongue. Reading, writing, arithmetic, and linear drawing will then claim their share of attention as auxiliaries in intellectual education. A wide range of elementary instruction may thus be attained which will serve as a foundation for future studies. Nature, the consideration of which is the chief object during this period, is, in fact, the source of all progress in every department of knowledge.

The objects of instruction which constitute the second degree must be diversified in such a way that they may bring into action all the rising powers of the child: in fact, his complete intellectual development can be effected only by the variety of objects in which he may be engaged, because different departments of instruction exercise different faculties and qualities of the mind. "General instruction, to whatever degree it is carried, should precede special instruction." * The diversity of information which has been early acquired gives correctness to the judgment, and renders every species of knowledge more clear and precise. He who has been exclusively engaged upon one particular class of ideas, however skilful he may be in his command of them, has generally an obtuse mind about other matters. The diversity of

* *St. Marc-Girardin.—De l'Instruction Intermédiaire et de ses Rapports, etc.*

objects to which the attention of young people is directed also furnishes the means of discovering the pursuits for which they have most inclination or aptitude. This varied instruction, the result of an enlightened family discipline, or of primary schools, which supply its place, ought to be universally diffused throughout all classes of society; because, in a civilised community, it is required by all people indiscriminately. It constitutes what is called primary or elementary instruction.

In the third period, the objects of instruction will be gradually raised in character and limited in number, with a view to prepare the pupils for the highest intellectual pursuits, and for the respective careers which, according to their talents, or their social position, offer to each the surest means of being happy and useful. This third degree of instruction, the particular province of secondary or classical and scientific schools, should comprise religious instruction and the theory of morals, a critical knowledge of the national language and literature, grammar, rhetoric, and logic, ancient and modern languages, ancient and modern history, physical, astronomical, and political geography, natural history, the mathematical and the physical sciences. Some of these departments of knowledge constituting a literary, and the others a scientific, course, should be respectively studied more seriously, according as children are preparing for literary or scientific pursuits; but, as these two objects are ancillary to each other, they should be prosecuted simultaneously, each becoming accessary when the other is considered as principal. The instruction of this period has obtained the name of secondary, or preparatory.

In the fourth period, that of professional education, young persons should complete the instruction already commenced, which bears on their future vocations. It is also towards the close of this period that they may direct their attention to the study of Legislation, Political Economy, Physiology, Moral and Mental Philosophy, and the science of Education, which is useful to all. They should, however, dwell more particularly on the special branches of knowledge which will enable them to fulfil honourably and successfully the duties attached to the liberal professions which they propose to embrace, or to the high offices which may be confided to them by their country or their Sovereign. The studies of this fourth period, which are carried on in special schools, colleges, and universities may be called superior or complementary instruction.

The subdivision of studies should, in a comprehensive system of national education, correspond to the diversity of social pursuits; for it is not to be expected that individuals can learn everything. Even those who have leisure and wealth sufficient to pursue the most extensive course of instruction cannot completely master its various branches; and the depth of information attained by individuals in any one department of knowledge is more profitable to the community than superficiality in many. The range of studies, at first unlimited, must therefore be gradually restricted to a narrow compass; and, when once young men have taken their place in society, they must confine their attention chiefly to the subjects immediately connected with their avocations. People can obtain superiority in any pursuit only insomuch as they are exclusively engaged in it. It is a chimera to aim at perfection in several things at the same time.

The information and accomplishments which have been acquired in youth, and which do not bear directly on professional pursuits, should be kept up as a relaxation and as a preventive against the narrowness of mind which arises from exclusive studies. A mere adept in his art is universally admitted to contribute but little to the intellectuality and enjoyment of social intercourse. It must not be forgotten that, if the subdivision of studies among the different members of the community, like the subdivision of labour in the arts, benefits the mass and serves the worldly interests of the individual, it does so to the prejudice of his general intellectuality. In proportion as the sphere of action of each individual is narrowed, his mental powers become contracted, and his activity is rendered purely habitual and instinctive; he is lowered as a rational being, and resembles the subordinate part of some powerful machinery—useful in its place, out of it insignificant.

SECT. VII.—PROFESSIONAL EDUCATION.

The elements of success in professional pursuits are *requisite knowledge* and *mental activity*; but of these two elements, the latter is by far the more valuable. A man with an active mind has the command of another man's knowledge; a man without mental activity has not the command of his own. Whatever be the career which young people propose to follow, it will always be easy to enter upon the special and complementary studies which may secure the knowledge it demands. But it is not so

with the mental activity which determines vocation, and without which it is impossible to rise above mediocrity: this element of success is of more difficult attainment, as it depends on natural dispositions carefully trained from the earliest infancy.

The peculiar mental activity suitable to any profession may be resolved into two principles—aptitude and capacity. Aptitude is an inclination, either the gift of nature, or the result of certain habits, which fits us for a particular kind of occupation. Capacity consists in the development of the physical, moral, and intellectual qualities for this kind of occupation.

Although all physical, moral, and intellectual qualities which constitute the perfection of human nature are desirable in every individual, whatever be his position in life, it must, nevertheless, be granted that certain offices, professions, and pursuits require for their successful fulfilment the predominance of particular qualities and special branches of knowledge. In order, therefore, to complete our classification of the objects of education, we subjoin in the following tabular arrangement a designation of the principal professions, with an indication of the aptitude, capacity, and instruction which are more especially required for each.

We have adhered, in the construction of the Tables, to the order which has been introduced through the preceding pages, while noticing the different classes of faculties and the acquirements arising from them, so that the physical, moral, or intellectual character of each profession may be perceived at a glance. The relative importance of the different acquirements of education and instruction may also be known by ascertaining the number of professions in which they enter as essential elements of success.

ADMINISTRATIVE PROFESSIONS.				MILITARY PROFESSIONS.			
MAGISTRACY.		JURISPRUDENCE.		ARMY.		NAVY.	
Aptitude and Capacity.	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*
Scrutinising eye. High morality. Pure conscience. Discretion. Equity. Uprightness. Loyalty. Disinterestedness. Philanthropy. Patience. Self-control. Moral courage. Prudence. Self-respect. Foresight. Decision. Rapid conception. Retentive memory. Clear judgment. Penetration. Elocution.	Ancient and modern languages. Logic. Rhetoric. Ancient and modern history. Political geography. Customs of nations. Biography of statesmen. Mental philosophy Moral philosophy. Jurisprudence. Political economy. Stenography.	Clearness and power of voice. Love of justice. Discretion. Disinterestedness. Patience. Self-control. Firmness. Prudence. Diligence. Habit of reflection. Spirit of investigation. Rapid conception. Ready memory. Clear judgment. Penetration. Elocution.	Ancient and modern languages. Logic. Rhetoric. Oratory. Ancient and modern history. Biography of great lawyers and orators. Mental philosophy. Political science. Jurisprudence. Stenography.	Physical activity. Robust constitution. Dexterity. Mechanical ingenuity. Obedience. Honour. Loyalty. Patriotism. Humanity. Prudence. Coolness. Patience. Courage. Firmness. Decision. Love of order. Love of glory.	French and German. Ancient and modern history. Political geography. Biography of great captains. Pure mathematics. Military engineering. Military law. Military architecture. Tactics. Linear drawing	Physical activity. Robust constitution. Acute sight. Dexterity. Agility. Mechanical invention. Obedience. Honour. Loyalty. Patriotism. Humanity. Prudence. Coolness. Patience. Courage. Resignation. Firmness. Decision. Love of order. Love of glory. Spirit of enterprise.	Modern languages. Hydrography. Physical geography. Voyages and discoveries. Biography of great seamen. Pure mathematics. Astronomy. Navigation. Hydrostatics. Meteorology. Magnetism. Maritime survey. Naval construction. Maritime law. Linear drawing.

PROFESSIONAL EDUCATION.

LITERARY PROFESSIONS.					
CLERGY.		EDUCATION.		ART OF WRITING.	
Aptitude and Capacity.	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*
Pleasing personal appearance. True piety. Humility. Universal sympathy. Veracity. Self-denial. Disinterestedness. Charity. Hospitality. Indulgence. Tolerance. Forgiveness. Benevolence. Affability. Philanthropy. Temperance. Moderation. Meekness. Resignation. Self-respect. Elocution.	Latin, Greek, and Hebrew. Ecclesiastical history. Logic. Rhetoric. Oratory. Eloquence. Mental philosophy. Moral philosophy. Theology. Study of the human heart.	Pleasing personal appearance. True piety. Equity. Veracity. Self-denial. Indulgence. Love of children. Politeness. Affability. Cheerfulness. Self-control. Self-respect. Equanimity. Patience. Vigilance. Perseverance. Firmness. Love of order. Retentive memory. Rich imagination. Sound judgment. Penetration. Elocution.	Ancient and modern languages. Particular and general grammar. Logic. Rhetoric. Physiology. Phrenology. Mental philosophy. Moral philosophy. Science of education. Thorough knowledge of the branch to be taught. Drawing.	Lively sympathies. Veracity. Discretion. Tolerance. Esteem for merit. Love of study. Love of fame. Mental activity. Habit of reflection. Spirit of observation. Rapid conception. Retentive memory. Active imagination. Originality. Refined taste. Clear judgment. Independence of mind.	Ancient and modern languages. Particular and general grammar. Logic. Rhetoric. Art of poetry. Mental philosophy. Study of nature. Study of the human heart. Extensive knowledge. Thorough knowledge of the subjects to be written on.

PROFESSIONAL EDUCATION.

LEARNED PROFESSIONS.				INDUSTRIAL PROFESSIONS.			
EXACT SCIENCES.		EXPERIMENTAL SCIENCES.		MECHANICAL ARTS.		CHEMICAL ARTS.	
Aptitude and Capacity.	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*
Precision of sight. Dexterity. Mechanical ingenuity. Physical activity. Prudence. Perseverance. Love of order. Love of the beautiful. Spirit of investigation. Spirit of enterprise. Presence of mind. Rapid conception. Inventive powers. Quick judgment.	French and German. Geology. Mineralogy. Archæology. Pure mathematics. Mechanics. Hydrostatics. Hydraulics. Acoustics. Surveying. Architecture. Linear drawing.	Dexterity. Mechanical ingenuity. Firmness. Discretion. Disinterestedness. Punctuality. Humanity. Self-control. Cheerfulness. Patience. Decision. Power of abstraction. Power of generalisation. Presence of mind. Spirit of investigation. Acute perception. Ready memory. Accurate discernment. Rapid judgment.	Ancient and modern languages. Natural history. Natural philosophy. Chemistry. Physiology. Anatomy. Phrenology. Linear drawing.	Dexterity. Mechanical ingenuity. Physical activity. Probity. Patience. Perseverance. Carefulness. Love of order. Good taste. Correct perception. Inventive powers.	French and German languages. Mineralogy. Metallurgy. Pure mathematics. Optics. Mechanics. Linear drawing.	Mechanical ingenuity. Acute senses. Probity. Prudence. Patience. Perseverance. Spirit of observation. Spirit of investigation. Correct perception. Inventive powers.	French and German. Natural history. Natural philosophy. Chemistry. Linear drawing.

PROFESSIONAL EDUCATION.

PRACTICO-SPECULATIVE PROFESSIONS.

AGRICULTURE.		MANUFACTURE.		COMMERCE.		FINANCE.	
Aptitude and Capacity.	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*
Kindness to animals. Patience. Perseverance. Foresight. Love of order. Spirit of observation. Correct perception. Spirit of invention. Spirit of enterprise.	French and German. Natural history. Physical geography. Geology. Chemistry. Natural philosophy. Meteorology. Geometry. Surveying. Mechanics. Hydraulics. Rural architecture. Rural law. Drawing.	Dexterity. Mechanical ingenuity. Probity. Love of order. Good taste. Correct perception. Quick conception. Spirit of invention. Spirit of enterprise. Correct perception.	Modern languages. Natural history. Inventions and discoveries. Biographies of inventors. Geometry. Natural philosophy. Chemistry. Political economy. Linear drawing.	Physical activity. Probity Affability. Punctuality. Industry. Prudence. Vigilance. Assiduity. Foresight. Love of order. Habit of economy. Spirit of enterprise. Correct perception.	Modern languages. Natural history. Physical geography. Arithmetic. Book-keeping. Foreign exchange. Political economy. Calculation of probabilities. Commercial law.	Probity. Punctuality. Prudence. Love of order. Habit of economy.	Modern languages. Arithmetic. Book-keeping. Foreign exchange. Arbitration. Calculation of chances. Political economy. Statistics. Commercial law.

PROFESSIONAL EDUCATION.

ARTISTICAL PROFESSIONS.

IMITATION OF NATURE.		IMITATION OF MAN.		IMITATION OF LANGUAGE.	
Aptitude and Capacity.	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*	*Aptitude and Capacity.*	*Instruction.*
Quick and correct eye. Active sympathy. Imitative powers. Industry. Patience. Perseverance. Love of fame. Refined taste. Spirit of observation. Vivid perception. Clear conception. Rich imagination. Inventive powers. Correct judgment.	French and Italian. Ancient and modern history. Mythology. Natural history. Physical geography. Archæology. Geometry. Perspective. Anatomy. Physiognomy. Biography of great artists. Study of nature. Reading of voyages. Reading of poetry.	Acute and correct ear. Flexibility of the hand. Active sympathy. Powers of assimilation. Self-confidence. Love of applause. Industry. Patience. Perseverance. Vivid imagination.	Italian Language. Knowledge of the human heart. Musical erudition. Biography of great composers. Laws of harmony. Thorough bass.	Flexibility of the vocal organs. Command of features. Active sympathy. Facility of assimilation. Power of imitation. Refined taste. Acute perception. Correct conception. Retentive memory. Quick imagination. Correct judgment. Elocution.	Grammar. Rhetoric. Oratory. Music. General information. Knowledge of the human heart.

If aptitude and capacity for any office, or profession, naturally manifest themselves in an individual, they are sufficient motives for his embracing it; he will have every prospect of success. If, on the other hand, his future station, or profession, has been previously determined, it becomes incumbent early to excite in him the aptitude and capacity indispensable for either, and to direct his attention to those branches of instruction which are more particularly requisite for attaining eminence and respectability in life.

SECT. VIII.—CONCLUDING REMARKS.

Education will perform a noble work, if, taking man from the cradle, it can train him to all that is required by society, if it raise him to the first rank among the useful and happy of his age, and if it render him worthy of the eternal life which God has in reserve for His creatures.

The art of directing all our faculties in the manner most likely to conduct us to these ends, is the most beautiful and the most useful application of mental philosophy. An acquaintance with the nature, power, and functions of the various faculties of man, with their connection and their dependence on one another, is indispensable, in order effectually to carry on the work of education.

A complete education is so vast and comprehensive in its details, that the instances must be rare in which it can be undertaken by a single individual. Its different departments should devolve on different persons—Physical education on the physician, Religious education on the clergyman, Moral education on the parent, and Intellectual education on the teacher.

In closing this rapid sketch, we cannot forbear regretting that we have been compelled by the limits of our plan to confine our observations to generalities of the briefest kind. We hope, however, that the little which we have said may suffice to show what are the instruments and what ought to be the objects of education. These two points were closely connected with our subject, because, on the one hand, an acquaintance with the instruments, or faculties, is subservient to the study of languages, and, on the other, we must know what are the objects which enter into a complete course of education, in order to give to each its due share of attention, and, whatever be the importance of languages, to guard against occupying young persons exclu-

sively with them. We leave to others the details of the process by which these instruments may be used for education in general, and by which these objects may be accomplished. Such a process would constitute the *Art of education*, while the systematic investigation of the universal and immutable laws of human nature on which it is based would constitute the *Science of education*. In proportion as this science advances, man will obtain a better knowledge of his own powers, a greater command over external nature, and, consequently, more abundant means of improvement and happiness. Let us hope that before long this momentous subject will be viewed in its true light, and that education will be ranked among the most complete and the most regular sciences, as it is among the most useful and the noblest objects of thought.

The three departments of education respectively belong to physiology, moral philosophy, and the science of the mind, from which are deduced their fundamental principles; but, by their results, and the influence they have on society, they may be considered collectively as a branch of political economy. Conducive as education is to the best interests of men, to the prosperity, happiness, and glory of a nation, it should be recognised as a social duty, imperative on every one for the sake of all. It is a debt of the state to the people; and it demands the fostering care of a wise Government, that it may be universally diffused through all classes of the community, and be rendered productive of all its advantages. Hence it is that many civilised countries have a Minister of Public Instruction, whose office it is to promote education among the people, to raise the standard of instruction, to protect society against incompetent or immoral teachers, to secure the respectability of the educational profession, and to encourage the sciences, the arts, and literature. But, in Great Britain, at the present day, national instruction, from the lowest to the highest degree, is without guarantee: there exists none for knowledge or for morality. Everything is abandoned to private speculation. England has, to use an expression of Napoleon, more "shops of instruction" than truly academical institutions.

As long as the British Government does not exercise its right to establish a comprehensive system of education, of diffusing and regulating the instruction which is required by the various classes of the community, of protecting and honouring those who, by their literary and scientific pursuits, raise the intellectual

character of the country, the nation will remain liable to the reproach addressed to it from all quarters by those who repudiate the degradation thus inflicted through the neglect of its rulers.

"There is neither unity, connection, nor plan in our education," says George Long; "and experience shows that education is always slow in progress, unless the state, which alone can do it, shall give to education that unity and definite purpose, which it gives to other branches of administration." * "England," says H. Mann, "is the only one among the nations of Europe, conspicuous for its civilisation and resources, which has not and never has had any system for the education of its people. And it is the country where incomparably beyond any other the greatest and most appalling social contrasts exist. There is no country in which so little is effected, compared with the expenditure of means; and what is done only tends to separate the different classes of society more and more widely from each other." †

In adverting to the degraded state of science and literature in England, Sir David Brewster declares that "their decline is mainly owing to the ignorance and supineness of the Government, to the injudicious organisation of the scientific boards and institutions, to the indirect persecution of scientific and literary men by their exclusion from all the honours of the state, and to the unjust and oppressive tribute which the patent-law exacts from inventors." ‡ "Given up to politics and novels," says another modern writer, § "and looking at literature like any other trade, for its selling price, we have let the Germans get as much ahead of us of late, in the higher ranges of classical learning, as the French in those of abstract science." ‖

The time is passed when the superiority of a nation rested exclusively on its navy and standing army. Literature and science now rank foremost in the estimation of mankind: Shakspeare, Locke, and Newton; Montesquieu, Descartes, and Buffon;

* *Study of Antiquity. Central Society of Education*, t. 3.

† *Report of an Educational Tour.*

‡ *Decline of Science in England. Quarterly Review*, Oct., 1830.

§ *Edinburgh Review*, No. cxv.

‖ If free access to books is a test by which to estimate the degree of encouragement afforded by a nation for intellectual pursuits, these Islands stand very low indeed in this respect, comparatively with other civilised countries. It was lately remarked by a statistician that Denmark has 5 libraries opened gratuitously to the public, Saxony has 6, Tuscany 9, Belgium 14, Bavaria 17, Russia 44, Austria 48, the United States 100, France 107, Great Britain *one*, Ireland *none*.

Goethe and Liebig; Dante and Galileo, are more highly venerated than great captains, or than the sovereigns themselves under whom they lived. And, when the present reigning monarchs are laid in the dust, their names will sink into insignificance comparatively with many literary and scientific men on whom some of them affect to look down from the lofty position in which they are placed by the exigencies of government. The aristocracy of rank, of birth, and of fortune, owes its existence to pride, ambition, and ignorance; the aristocracy of virtue, of talent, and of knowledge, is founded on nature and reason; the former is temporary, the latter immortal. The only imperishable glory of Athens and Rome is that which has been conferred by the exquisite refinement of their civilisation, and by the genius of their writers, orators, and philosophers. Modern governments should, then, attend to their educational and to all their literary and scientific institutions as they do to their naval and military establishments, if they wish their countries also to attain imperishable glory.

BOOK II.

OF THE SIGNS OF OUR IDEAS,

AND IMPORTANCE OF THEIR ACQUISITION IN VARIOUS LANGUAGES.

" * * * * cet art ingénieux,
De peindre la parole et de parler aux yeux;
Et par des traits divers de figures tracées,
Donner de la couleur et du corps aux pensées."—BREBEUF.*

"Languages belong to the class of means. In preferring one to another, we should be guided by the principle of its utility: that language, in which most knowledge is contained, is the most useful."—G. COMBE. †

"Yes! Education reform will come, and conquer like every other."
THOMAS WYSE. †

CHAPTER I.

DIFFERENT SPECIES OF SIGNS.

SECT. I.—NATURAL SIGNS,—LANGUAGE OF ACTION.

A LANGUAGE is a system of signs which represent our thoughts and sentiments, and serve for the interchange of ideas in social intercourse.

God, having made man a social being, provided him with means of mental communication suited to his condition. The sensations which he receives through his physical faculties, convey, as we have seen (p. 16), impressions to the brain; this organ, in its turn, by an instantaneous reaction, prompts all the muscles of the human frame, and especially those of the face, to corresponding

* *Imitation de Lucain.* † *Lectures on Popular Education.*
Speech in the House of Commons, 19 *May*, 1835.

actions which declare the existence of inward feelings, and which, by the force of sympathy, communicate these feelings to others. The looks, smiles, laughter, tears, sighs, groans, gesticulations, motions, inarticulate sounds or cries, which follow as the immediate consequences of received impressions, are the natural expressions, the necessary signs of his thoughts and emotions. This instinctive succession of impressions and expressions, this double faculty of receiving and communicating ideas, constitutes the language of action. Every tone of the voice, every change of the countenance, every movement of the limbs, every attitude of the body which bespeaks a desire, a feeling, or a thought, belongs to this language of nature.

Destitute of natural signs, neither man nor any of the gregarious species among the brute creation, could have conformed to the laws of their organisation. But with the language of action, sympathy awoke, and social communion began between our first parents from the moment they were placed by their Maker in one another's presence. Through its medium, men of all countries, civilised or uncivilised, can communicate with each other; the youngest child is made to understand those who approach him; the lower animals act under its influence in their mutual relations; they even readily obey the will of man which it conveys. Thus has the Almighty gifted his noblest creature with the means of exercising his sovereignty over the animal creation.

Man never entirely divests himself of this innate language, even in the highest state of civilisation, and in the possession of the most finished articulate idiom. It is especially when he is under the influence of the passions, that nature supplies the deficiencies of art, that tones, looks, gestures, and attitudes give energy to the articulate expression of thought which they accompany. This natural eloquence, so well calculated to move and excite public assemblies, imparts life and meaning to a discourse, when, from the poverty of articulate language, obscurity of the speaker's words or ignorance of his hearers, the oral expression would often prove ineffective. Of this fact we have a remarkable example in the extraordinary enthusiasm to which St. Bernard roused the German peasantry, by preaching the Crusades, although he addressed them in French, a language which they did not understand. Cicero informs us that it was a contest between him and Roscius, whether he could express a sentiment in a greater variety of phrases, or Roscius in a greater

variety of looks and gestures. The action by which Marc-Antony, in Shakspeare's play, uncovers and shows to the Roman people the bloody corpse of Cæsar, is not the least eloquent part of his harangue.

This eloquence of the body, as it was called by the ancients, was well known to the orators of the republics of Rome and Athens. Demosthenes showed what importance he attached to the language of action, when, being asked what was the first, the second, and the third requisite of oratory, he answered each time, "action." Æschines, his opponent in the celebrated Crown cause, acknowledged also, although indirectly, the power of action. The Rhodians, among whom he had retired, one day applauding the speech of Demosthenes, which he was reading to them, he could not help exclaiming, "What would you have said if you had heard Demosthenes himself?" Everybody will assent to Quinctilian's opinion, that an indifferent speech, accompanied with suitable tones and gestures, has more effect than the most elaborate discourse without them: many speeches and dramas are insipid in reading, which, at the bar and on the stage, raise the liveliest emotions.

The language of action, capable as it is of expressing all the emotions of the soul and various states of the mind, was doubtless confined to purely natural signs, when it served as a medium of communication to man as yet in the primitive state of simple nature. But it has, in civilised life, undergone great improvement from the use which is made of it, as a branch of oratory and dramatic performance, as a means of communication between the deaf and dumb, and in the mute scenes known under the name of pantomimes. Thus modified and instituted for particular purposes, it can no longer be considered as a system of natural signs.

SECT. II.—ARTIFICIAL OR CONVENTIONAL SIGNS,—PRIMITIVE LANGUAGE.

However expressive the language of nature may be, it is yet very imperfect as a vehicle of thought. It does not provide expression for all the wants of intellectual and social life in an advanced state of civilisation,—the true state for which man was created. Its deficiencies, and the increasing demands for intellectual communication, soon led to articulate language, which, although arising from the spontaneous action

of the human faculties, may be called *artificial*, being of human formation, and consisting, as it does, of conventional signs.

The primeval elements of this language of art had their origin in human consciousness: the perceptions of sounds left on the mind by all the objects which manifested their presence through the faculty of hearing, being remembered and associated with these objects, became their fixed and characteristic symbols. Every individual, being affected in the same manner, and anxious to communicate his impressions and feelings to his fellow-creatures, availed himself of his power of imitation to give external existence to these symbols, as required by the necessities of social intercourse. Articulate imitations were originally the words by which one man called the attention of another, and directed it to particular objects. Thus, assisted by a favourable organisation, he derived from nature speaking all around the first signs of articulate language. Intended as he is to accomplish his own development, he was able to extend this language with the aid of the language of action, which, by a wise provision of the Creator, is inherent in his being. In fact, without a natural, no artificial or conventional language could have been instituted; because a conventional mode of expression implies previous compact or agreement to attach certain meanings to certain signs; but compacts or agreements could not be entered into without some medium of communication. Hence there must have existed a natural previous to an artificial language.

The first man was, we presume, under the influence of the same laws which govern us as regards the innateness of the language of action and its subserviency to the formation of articulate signs: we are not informed that his organisation was different from ours; and the gift of speech, with which he is supposed by some to have been originally endowed, was, no doubt, simply the power and instinctive desire of making words concurrently with his wants, and in accordance with the laws of his physical and psychological constitution, as we have shown when speaking of the vocal organs. It is, in fact, in the nature of human reason, as created by God, to produce articulate language.

We are the more inclined to entertain this opinion as we are told that God brought the animals before Adam "to *see* what he would call them;" which clearly demonstrates that the primitive articulate language was of Adam's own formation; for had it been natural, that is, implanted in him as one of the essentials

of his constitution, there could have existed no motive for his Creator wishing to *see* how he would form names which were made obligatory by His divine will. Moreover, it may be presumed, consistently with the universal and invariable laws of our nature, that this language could not have been innate, since it has not, like all the original powers of Adam's constitution, been transmitted to his descendants. Nor can we suppose it was lost; for it is not his intellectual, but his moral state, which has suffered in the fall.

The primitive articulate language, scanty as it must originally have been, was, conjointly with the language of action, fully sufficient for the limited wants of our first parents, and well adapted to their simple and unvaried mode of life. Their admiration of the beauties of nature, their sense of gratitude to God, and their mutual love, pure and unsophisticated, did not demand the aid of long speeches. They were actuated by feeling rather than by reasoning; their mutual communion was of an exclamatory rather than of a dissertative nature. But, as the principle of progressive development prompted, this language expanded with their advancing social condition.

If man had received a ready-made and complete language, the signs would have preceded in his mind the perceptions and notions they were intended to express, and all the powers with which he was endowed for contriving, selecting, combining, and modifying words according as he acquired ideas, would have remained inactive; or he would have had the consciousness of perceptions, notions, and feelings prior to all experience, and to the action of the faculties given him for their acquisition,—a double anomaly which could not be reconciled either with the free-agency and physio-psychological constitution of man, or with the wise provision of his Maker. How can we suppose that the Creator would give words, a phraseology, and a grammatical system to a being not only already in possession of the primordial powers of contriving signs suitable to his wants, but impelled by the law of his nature to contrive them. Why imagine a miracle to explain effects which necessarily and spontaneously arise from man's constitution. It may be added that, if the first articulate tongue had been originally framed by God, as an innate faculty of man, its perfection, as well as its divine origin, would have secured its permanent existence, and the primitive language would not now be a problem.

St. Gregory of Nyssa ridicules those who have, as he says, the

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simplicity to believe that God was the framer of articulate language. He calls this opinion a folly worthy of the extravagant presumption of the Jews. "God," he adds, "made the things, not the names; but he endowed man with the power of giving to the things which He had created such names as were truly expressive of them." . . "This function," he continues, "is inherent in the rational nature of the human species, who have invented all languages, and have been gifted with the intellectual and organic faculties necessary for that purpose." *

SECT. III.—SPOKEN OR ARTICULATE WORDS.

The conventional signs of the artificial language are of two kinds—*spoken* and *written words.*

Spoken words are composed of two elements—*vocal sounds* and *vocal articulations.*

Vocal sounds are emissions of the air from the lungs, rendered sonorous in passing through the larynx, and modified by the shape of the oral cavity through which it passes. The diversity of sound depends on the different degrees of aperture of the mouth and nasal fossæ, and on the peculiar position of the upper organs during the emission of the sonorous air; the power of the voice depends on the volume of air and on the force with which it is expelled; while its pitch, as well as its different intonations and modulations, result from different states of the lower organs.

If, during the emission of the air, the organs of speech be at rest, the sound produced will be simple and elementary; if their position undergo a change, a mixed or compound sound will be the result. An elementary sound may be continued without variation as long as the air is escaping from the lungs: the property of being prolonged is, therefore, an essential characteristic of vocal sounds (4).

Vocal articulations are the effects produced by the organs of speech when set in motion by a determination of the will, and acting on the sonorous air as it is passing. Different articulations are produced by different organs; hence they take their names from the respective organs engaged in their formation, namely—*labial, lingual, dental, palatal, guttural, linguo-palatal, linguo-dental,* and *dento-labial.* An articulation is elementary, when it is formed by the simple action of one, or the simultaneous

* *Contra Eunomius,* Orat. XII.

action of two organs; it is mixed or compound when the sonorous air is modified by the successive actions of one or more organs.

The upper organs, when brought into contact in the act of producing the vocal articulations, obstruct the passage of the sonorous air; in consequence of which some articulations, like those represented by the characters *b*, *d*, *k*, totally interrupt the vocal sounds after which they come, whilst others, like the articulations expressed by *f*, *j*, *s*, cause only a partial interruption. Those of the first kind, the more numerous of the two, cannot last longer than the action by which they are produced; those of the second allow a faint noise, or whisper, to be continued, which, however, has no character of vocality. Instantaneousness is, therefore, the distinguishing characteristic of articulations, as duration is that of sounds.

Vocal sounds may be loud or soft, acute or grave, short or long, —pitch, intonation, and quantity being their special properties; while vocal articulations are weak or strong, soft or harsh, according as the muscular action by which they are produced is gentle or violent.

To mark still better the distinction between these two elements of speech, we will observe that the vocal sounds are produced below the mouth, and their existence depends on the immobility of the upper organs; whilst the vocal articulations are produced in the mouth, and their occurrence is due to the motion of these very organs. Sounds are uttered separately from articulations when the organs remain motionless during the emission of the sonorous air; but articulations cannot exist independently of vocal sounds, because they are produced by the action of the organs upon those very sounds.

It is the combination of the two vocal elements which constitutes what is called *articulate* sound in contradistinction to pure sound, said to be *inarticulate*, that is, unmodified by the action of the articulated organs. Articulate sounds can be produced only when the will directs the upper vocal organs in their formation, whereas inarticulate sounds are formed under the simple impulse of nature. The sounds which are heard in laughter and in cries, which are produced under the influence of violent emotions, and which are uttered by a great number of the lower animals, by new-born infants, by idiots, and by the deaf and dumb, are inarticulate. The child is unable to form articulations in conjunction with vocal sounds until several months after his

birth, when his dawning reason guides his first attempts at imitating the familiar words which he has most frequently heard, and with which he is beginning to associate ideas.

The various motions of the upper vocal organs in producing articulations, as also the different positions and degrees of opening of the mouth in uttering vocal sounds, are so distinct and so well marked, that the deaf and dumb may be taught to read the spoken thoughts on the lips of the speaker.

Man, impelled by a law of his constitution, formed by imitation and analogy all the vocal signs which, consequent on his refined perceptions and extended social relations, he required for the expression and communication of his thoughts and feelings. In the formation of an articulate language, he instinctively modified his natural cries into a resemblance of the noises produced by the things signified, that the words might recall the ideas. Thus he originally named many animals; thus, also, savages and infants still name the objects which are new to them. The mystery which veils the primitive psychology of humanity, could, in great measure, be unravelled by a study of man in the first years of life and the first stages of society.

Imitation of the sonorous effects of nature, of the cries of animals, and the mechanical noises of industry, produced all the radical words expressive of the properties and actions which recalled the various sensations of hearing. The analogy of the function and effect of the vocal organs with those of the other organs, extended, by comparison, this process of onomatopœia to the denomination of things destitute of sound. "Onomatopœia," says Ch. Nodier, "has been the mechanical agent of language, and comparison its intellectual agent." * The important part which onomatopœia assumes in the formation of language would, if properly understood, assist in its acquisition.

The innumerable prototype sounds of nature, like the endless variety of colours and forms which adorn the external world, are reducible to a few elements. Hence, the number of sounds and articulations which form the elements of all languages, is not very considerable; but, by varying the intonations of the vocal sounds, and the degree of force of the vocal articulations, the human voice is capable of modifying them indefinitely. Many nations, among which may be particularly mentioned the English, express different ideas by a change in the accentuation of their words. But the Chinese surpass all other people in this respect: their spoken

* *Notions Élémentaires de Linguistique.*

language, although composed of less than 500 radical monosyllabic words, can, by quantity and modulation in pronouncing them, multiply the expression of ideas to 1203 vocables, according to Abel Rémusat, * and to a few thousands, according to other writers.

A very limited number of vocal elements have, by means of their diversified intonations and combinations, been found sufficient for the purposes of oral expression; and people, in all countries, yielding to the influence of the climate in which they live, have adopted those which suited their peculiar habits. Hence, there are sounds and articulations which exclusively belong to each language, whilst those which are more general in nature and more easily produced are common to all. But even in the production of these, there exist between various nations slight shades of difference, which arise from local circumstances peculiar to each people, and which are with difficulty appreciated by those who are unused to them. The predominance of one of the vocal elements over the other, is chiefly determined by the nature of the climate. Softness is the characteristic of the languages of warm countries, as indolence is that of the people; they abound in vocal sounds; whereas less genial climes impart to their people an energy which is marked in their idioms by a predominance of articulations.

Such is the effect of a warm or cold climate in respectively relaxing or contracting the muscles, and in producing softness or energy of vocal action, that, under its influence, the southern nations of Europe indulge in full, open, long sounds, and varied intonations, which render their pronunciation clear, sonorous, and musical; whilst, in advancing towards the north, the languages lose more and more in fulness and distinctness, and, with few exceptions, are characterised by close and short utterance, as also by numerous articulations, which give them force and rapidity at the expense of melody. It is this difference in the euphonic composition of languages which made Charles V. wittily observe, that English should be used in speaking to birds; German, to horses; Italian, to women; French, to men; and Spanish, to God.

All articulate languages are, in their present form, purely conventional, although the original words of the primitive languages from which they are derived, were instinctive imitations of natural sounds, or modifications of such cries as were uttered under the impulse of emotion. Articulate words directly repre-

* *Recherches sur les Langues Tartares.*

sent ideas: and, with the natural signs of the language of action, which are always united to them as indispensable auxiliaries, there is no thought of the mind, no sentiment of the heart, which they cannot express. In this happy union of the natural and conventional signs consists the perfection of language.

Articulate words are the readiest signs of ideas, and the most appropriate to their object. More convenient than natural signs, they can be used at any time, and in any position, by day or by night, standing or lying down, in health or in sickness, and simultaneously with most of the occupations of life. The advantage which the ear possesses, of not being, like the eye, diverted by surrounding objects, the inexhaustible variety of sounds and intonations which can be produced without effort, and the charm which sympathy attaches to the vibrations of the human voice, all favour the use of speech as a vehicle of thought.

In the act of speech, our being seems divided into two distinct individuals in intimate communion with each other—the one speaking, the other listening; the one executing, the other judging the performance. No other vehicle of thought so effectually elicits this double action of the mind; none so intimately communicates with the brain; none so perfectly fulfils the functions of signs, or favours solitary meditation. The numberless intonations and inflections of the voice can manifest the slightest or the deepest emotions, and can exhibit the minutest shades of ideas. The voice, modified as it is by the vocal organs, is so delicate and so docile, so rapid and so flexible; it is capable of so much cultivation, and endowed with so many resources; that it is the best interpreter of thought, and the most effective instrument of the human mind. *

SECT. IV.—WRITTEN OR ALPHABETICAL WORDS.

Man requires for the accomplishment of his destiny as a social and perfectible being, that thought be transmitted beyond the narrow limits of place and time within which articulate language exercises its power. Through speech alone the benefits of intellectual communication would extend but to a few individuals; nations, provinces, and towns would remain isolated; generation would succeed generation without inheriting the experience of those who preceded them; in a word, mankind would remain for ever in a comparative state of barbarism. The art of writing is

* See Maine de Biran's *Influence de l'Habitude sur la Faculté de Penser.*

indispensable to enable man to fix and extend his ideas, to improve and secure his knowledge. To writing, society owes its progress; science, its perfection; genius, its glory; and the world, its civilisation.

Written words are composed of two elements, corresponding to the elements of the spoken words: they are the *vowels* and *consonants*, which constitute the characters of the alphabet. Vowels are the representatives of vocal sounds; consonants, of vocal articulations; and their combinations, of articulate sounds. Alphabetical words were consequently posterior to articulate words; and, at this day, there exist many tribes who do not yet possess a written language, although none are destitute of an articulate one.

The vowels and consonants are intended to be combined in the written words, in the same manner as the elementary sounds and articulations in the spoken words. Hence, as the articulations are inseparable from the sounds on which they act, so the consonants must be united to the vowels.

In a perfect phonographic system each vocal element should always be represented by one and the same character. However, the alphabetical representation of most languages is far from being exact: the written elements do not always correspond to the spoken elements, each to each; nor is the number of the former equal to that of the latter. Owing to this imperfection, it often occurs that a simple character stands for a compound sound or articulation, and conversely that a compound character stands for a simple sound or articulation: *i* and *g*, in the words *file* and *gem*, are examples of the first irregularity; *au* and *ch*, in *cause* and *chaise*, are examples of the second. It is the province of orthoepy to determine, for each language, the extent of these irregularities in the pronunciation of its words, as it is that of orthography to determine the peculiarities of its written form; the one deals with vocal sounds and articulations as the other deals with vowels and consonants.

The vocal and the alphabetical elements are perfectly distinct: yet the want of a proper analysis of them and the immediate connection which exists between the sign and the thing signified, have often led people to use one for the other, and to apply to the vowels and consonants the properties which belong only to the vocal sounds and articulations. This confusion of ideas should be avoided, as it renders these first notions obscure and intricate to learners.

Another very prevalent error in our modern idioms is that of confounding the names of the alphabetical characters with their significations or powers as constituent parts of words. A third error, equally prevalent, is that of attributing sound to consonants: these characters may, in grammatical phraseology, be said figuratively to be articulated; they certainly cannot be said to be sounded. Perspicuity requires the import of the alphabetical characters to be thus expressed, the *sound* of a *vowel*, the *articulation* of a *consonant*, and the *pronunciation* of an *articulate syllable*.

These characters are essentially phonographical; but the written words into the composition of which they enter, although merely the representatives of the corresponding spoken words, become, by frequent use, immediate signs of ideas. For the deaf and dumb who read and write, they are exclusively ideographical, that is, directly significant of ideas. It is also in this light that the written words of a foreign language are considered by learners as yet unacquainted with their pronunciation. This written form of language has been almost universally adopted as affording the readiest means of multiplying indefinitely the expression of thought. It has also this advantage, it does not burthen the memory, being composed of only a very limited number of elements, the combinations of which correspond to those of the articulate language.

The alphabetical characters possess the two-fold advantage of rendering permanent the transient sounds of the spoken language, and of following them through all their combinations in mental investigations. They contribute with them to the exercise of the intellectual faculties, and to the advancement of civilisation. Conjointly with articulate sounds, they constitute a double system of signs which completes conventional language, and supplies all the deficiencies of the natural one. By means of the written signs the transmission of thought is no longer limited in space or time, and man is rendered, as it were, the citizen of every country, the contemporary of every age.

SECT. V.—IMPORTANCE OF THE ARTICULATE AND THE ALPHABETICAL WORDS.

The assistance which the articulate and the alphabetical words lend to each other is of the utmost importance in combining our simple ideas and analysing those which are complex. This

double system of signs is as useful for the acquisition and concatenation of ideas as for their expression. Without them, we should have but very few, very incomplete, and very confused notions ;—the human mind would remain in a state of perpetual infancy. Hence the opinion of Condillac that languages are analytical methods which guide our intellect in its calculations. "We judge," he says, "and reason with words as we calculate with figures. Languages are to nations what algebra is to geometricians." * Hobbes maintains that the simplest mathematical truth would have been absolutely indiscoverable without words. †

The human understanding could not have the intuitive consciousness of a number above 6 or 7 ; but, with the numerical signs and the decimal classification, it embraces the highest numbers, and calculates quantities, the conception of which is beyond the power of imagination : so the artificial signs of ideas, both articulate and alphabetical, furnish us with means of carrying mental investigations far beyond the limits of intuition. The different purposes to which they are applied elicit the various exercises by which the mind is cultivated and enriched ; for it is by means of language chiefly that the ideas on which these faculties operate are remembered, combined, associated, analysed, compared, and classified.

Language is, it is true, the product of reason ; but it reacts on it and aids in its further development. The better it is adapted to the expression of thought, the more rapidly will the sciences advance, and the more efficiently can the intellectual powers be exercised and improved ; in other words, on the perfection of language depends that of the mind. Condillac observes that nations can produce superior geniuses only when their languages have made considerable progress. ‡ We think and reason the better in proportion as the language we use approaches nearer to perfection, and as we know it the more thoroughly. Copiousness and perspicuity of expression are tests of intellectual development ; for an extensive knowledge and perfect intelligence of words imply a rich collection of ideas, and a facility in appropriating those of others ; whilst precision and correctness of language indicate logical accuracy of thought. The civilisation of a people will always be found commensurate with the degree of perfection of their language. This perfection, however, can be

* *Cours d'Etudes. Discours préliminaire.* † *Leviathan*, Ch. IV.

‡ See *Essai sur l'Origine des Connaissances Humaines*, Ch. XV.

attained only by the sustained labour of a long succession of generations.

Through the combined instrumentality of the spoken and the written words, there extends from the earliest periods of society a continued chain of the thoughts of men, which, in the succession of time, offers to each individual the rich inheritance of the accumulated acquisitions of all those who have patiently investigated and discovered the great truths on which man's well-being and highest improvement depend. This double system of signs, by also facilitating social and intellectual intercourse, gives activity and efficiency to the great principle of human perfectibility: through this intercourse, individual virtue and intellect profit the mass, and general improvement reacts on individuals —multiplies indefinitely their energies. Association receives its power from language; the wider the circle of intellectual communication the greater is that power. The human race will advance in civilisation and morality in proportion as nations are able, by mutual exchange of thoughts and good offices, to bring in the common stock their labour, their discoveries, and their progress.

As the benefits which accrue to society from this double system of signs depend, in great measure, on the perfection of the vocal and the alphabetical elements of which they are composed, means should be employed to bring them to the simplicity and regularity of which they are capable, subjecting each to one import, establishing between them unequivocal correspondence, and thereby extending their analogies. These stipulations of perfection in the elements of the spoken and the written words are very desirable; they would rapidly lead people from speaking to writing their native tongue, and from writing to speaking foreign languages; they would secure uniformity of expression among all the inhabitants of one country; would advance intellectual education by saving a considerable portion of the labour and time, which, from the imperfections of most modern alphabetical systems, are employed in learning the arts of reading and orthography; finally, they would promote social intercourse among men of different countries, by affording them facilities for acquiring each other's language. It is thus that, by simplifying the signs, languages would be made to approximate, and nations to fraternise.

From the mutability inherent in human things, the pronunciation of living languages undergoes variations, against which we

ought to guard; for their orthography, although equally variable, has always been slow in passing through the corresponding changes which its representative character and the perfection of language imperatively demand. It is, however, less difficult to effect changes in the mode of writing than in that of speaking; because writing being, in ordinary circumstances, practised less than speaking, and taking place at a later period of life, the habits of orthography must be proportionably weaker, and more easily broken, than those of pronunciation. The improvements effected until now in our orthographical systems are insufficient to remove their numerous anomalies. Isaac Pitman and A. I. Ellis have, it is true, of late, proposed a spelling reform, which may be considered as complete; but, although based on rational principles, it has little chance of being generally adopted, owing to the introduction of new characters, which considerably alter —nay, disguise the language. Whatever be the different powers of the same letters in our imperfect alphabets, it would be sufficient for all practical purposes if these letters and their combinations, such as they are, were made invariably to represent the same sounds and articulations in similar circumstances. No system of orthography should be recognised which disregards the etymology of words, which obliterates altogether their history.

A few literary men, consisting of popular writers, editors of the press, and eminent publishers, who, anxious to facilitate the acquisition of languages, would unite their efforts to attain so useful an object, might gradually introduce all the improvements which the orthography claims, and could not fail to fix its usage. The recent introduction of a new system of weights and measures in France was a far more difficult conquest over the habits of a people than could be the changes required by any of the modern languages. The modifications which, for centuries past, have taken place in the mode of writing many languages, sufficiently prove the readiness of people in adopting orthographical improvements. Such improvements, aiding the progress of civilisation, ought to receive the support of universities and governments: their adoption in educational establishments, and in all public documents, would soon give them currency.

SECT. VI.—PICTORIAL AND IDEOGRAPHICAL WRITING.

The alphabet is indispensable to the perfectibility of mankind, it is the source of the highest intellectual enjoyment; and yet this admirable discovery, simple as it appears, was not made until ages after other modes of visible expression had been used. Men knew how to draw before they knew how to write: sketches of things were their first attempts at visible language. As imitation had led them to the first articulate words, so it suggested to them the first written signs. But as there is no affinity between the imitation of sounds, and the imitation of forms, speech and writing were originally independent of each other—both modes of expression being ideographical.

The aboriginal Mexicans, in common with other nations of antiquity, had recourse to pictorial representations, to preserve their laws and their historical records; but these rude images must have been very imperfect means of intellectual communication. The Egyptians, who had also originally adopted the ideographical method of picture-writing, felt, as they advanced in civilisation, its insufficiency and inconvenience. Not satisfied with imitations of material objects, they represented immaterial ones by symbols founded on the analogy which they perceived between the moral and the physical world; and advanced one step towards the discovery of the alphabet in expressing words and, especially proper names, by characters significant of objects, the successive initial syllables of whose names produced collectively the articulate words intended to be represented. This mode of writing, the second stage of the art, partaking of the nature of pictures, symbols, and phonetic characters, represents both sensible objects and abstract ideas: it is known under the name of hieroglyphics.

In the course of time this graphic system was considerably modified by the successive contractions which its elements underwent, and by the gradual introduction of phonetic, and of apparently arbitrary characters, which were intended to simplify the hieroglyphic writing. The last stage of its progress in abbreviation and simplification has received the name of *enchorial* or *demotic* (popular); the intermediate stage between the demotic and the original hieroglyphics is known under the name of *hieratic* (sacerdotal). The demotic, hieratic, and hieroglyphic methods were, for many ages, used simultaneously among the Egyptians.

The written characters of the Chinese mark a further progress in the art of writing. They are neither pictures nor symbols, but probably modifications or contractions of them; and, in their present form, whatever may have been their origin, they possess the chief characteristics of pictorial and symbolical figures; they are ideographic, not phonographic. In consequence of these written signs directly representing ideas or the things themselves, the Chinese, Japanese, Tonquinese, Siamese, Coreans, Tibetians, Cochin-Chinese, and the natives of Loo-Choo, whose articulate languages are totally different, but who use the same written characters, understand each other perfectly in writing, although not in speaking. This is precisely what happens with our numerical figures and algebraical characters, which, representing numbers and quantities themselves, and not the sounds of the names given to these numbers and quantities, are understood by people who speak different languages.

The advantages which the ideographical written language possesses of being understood by nations who speak different idioms, as is the case with the Chinese characters, is sadly counterbalanced by the invincible obstacle which it opposes to the progress of civilisation. In fact, the written signs which directly represent ideas, must be multiplied as the latter are accumulated, and thus become necessarily complicated; they cannot express thoughts in their infinite variety, or argumentative propositions in all their relations and connections; they, consequently, are unfavourable to literary and scientific pursuits. It is well known that, among the Egyptians, learning was accessible only to the priests, who, long after the introduction of the alphabet, continued to employ the hieroglyphic and hieratic characters as a sacred writing, which served them to shroud in mystery their religion and science. As they alone preserved a knowledge of this symbolical writing, the rest of the nation was sunk in ignorance.

The Chinese written characters are a kind of modified hieroglyphics, formed from 214 roots; their number, which amounts to upwards of 80,000, and which must go on increasing with the progress of the arts and sciences, renders them so perplexing, that the oldest and most profound literati of the Celestial Empire have never been able to master them all. Printing was known in China several centuries before its introduction into Europe; schools are multiplied in that vast country; the most lucrative and honourable public offices are the reward of literary merit;

yet, with these stimulants to learning, the Chinese are remarkable for their ignorance: civilisation among them has been stationary for thousands of years. This may be attributed as much to their written language, which, as just noticed, opposes considerable obstacles to the communication of ideas and to the operations of the mind, as to their stinted system of education, which calls into activity only the faculty of memory, and makes learning consist of very little more than repeating the writings of Confucius.

The want of correspondence between the spoken and the written languages of China makes them really two distinct idioms. The Chinese student who learns to read and write receives no assistance from his previous knowledge of the spoken words: a foreigner is completely on a par with him in this study. Moreover, as each word is a distinct character, there is necessarily great labour and perplexity in distinguishing and recollecting these numerous signs. No more than half a dozen of them are formed of a single line; and many are so complicated as to contain forty, fifty, and even more strokes. Such is the difficulty of the art of reading in the Chinese language, that not less than eight or nine years are required to learn to read and understand books which treat of the most familiar subjects. Double that time is hardly sufficient for gaining a mastery of the ten or twelve thousand characters supposed to be requisite for ordinary social intercourse. Another great disadvantage which results from the absence of a written language representing the spoken, is the variability to which the pronunciation is therefrom liable. The inhabitants of the different provinces of China do not always comprehend one another, in consequence of the changes which oral communication is constantly undergoing in each.

SECT. VII.—DIFFERENT ALPHABETS AND MODES OF WRITING.

It is fortunate for the progress of civilisation, that ideographical symbols and characters have been almost universally discarded. The difficulty with which they are formed, and the considerable space occupied by them in expressing even the simplest idea, led men to seek for a simpler system of writing. This system was found in the phonographic letters of the alphabet. But it is probable that these analytical signs of speech were not invented at once, and that the pronunciation was but gradually decomposed into its primary elements, syllabic charac-

ters having served as an intermediate stage. The Ethiopian and several Asiatic languages offer examples of the written syllabic signs. The Hebrew consonants, which are used separately from vowels, may be considered as syllabic characters. The Cherokee alphabet, invented thirty years ago by Sequoyah, a North American Indian, presents another example of this phonographic system. The written signs of this modern Cadmus amount to eighty-five, which are syllabic, with the exception of six, representing five vowel-sounds, and the simple articulation *s*. Let us here pay our tribute of admiration to this untutored genius, to this great benefactor of the Cherokees, whom he has raised to a position unattained by any other Indian tribe, and whom he has made a reading and intellectual nation.

The elementary sounds and articulations of all languages, do not, perhaps, amount to more than sixty, including the marked intonations of the same sounds, as in French, *a* and *â*, *o* and *ô*, and the different degrees of force of the same articulations, as *b* and *p*, *d* and *t*, &c. Sixty elementary phonographic characters may, therefore, variously combined, suffice to represent the articulate words of all languages, whereas 100,000 ideographical symbols are barely adequate to express the ideas of one nation. It would be a noble undertaking, and one worthy of a philanthropist familiarised with the articulate language of China, to adapt the Roman alphabetical characters and Greek accents to the representation of its vocal elements. Let the example of Sequoyah be profitable to the interesting inhabitants of that country.

This task presents no very great difficulty, as the principles on which it can be effected are now well understood. The various systems of stenography adopted in Europe, and, especially, the phonetic short-hand, lately introduced in this country by Mr. Pitman, prove the possibility of a new mode of writing being practised concurrently with one long established. The examples of the Coreans and Tibetians, who possess a phonographic alphabet, conjointly with the Chinese ideographic characters, are other striking precedents for the practicability of the change we suggest. The unbounded benefit which would accrue from the alphabetical representation of the Chinese articulate tongue, both to China and to the Western world, would probably induce the Chinese to receive it favourably, in spite of their attachment to old practices; whilst it would stimulate the Europeans, and, especially the Christian missionaries who reside in that country,

to use their utmost energy in propagating it among the Chinese population.

The Roman character, as now generally used in Europe, has been lately adopted by a few German writers in preference to the uncouth Gothic. If all Germans would follow this example, their language would perhaps be learned by foreigners more extensively than it now is. It is to be wished that the Roman alphabet were also applied to the writing of the Oriental languages; for their complicated characters are a great obstacle to their being generally studied. The advantages of such a change would not be confined to learners, missionaries, or travellers: it would afford inducements and facilities to the different nations of Asia to acquire each other's language, and to study our European literature and civilisation. The practicability of such an innovation is proved by precedents; and, in addition to those already noticed, we may mention the Egyptians, who passed from ideographic to phonographic characters. A change also took place in former times among the nations of Europe, who surrendered their original alphabet for that of Rome. The Assamese, in Hindostan, have but lately discarded their own alphabet for the Bengalese; and the introduction, some years since, of the Roman characters into India, has met with unexampled success. In Calcutta, Delhi, and other places, Europeans, as well as Hindoo and Mahomedan priests, are at the present day engaged in publishing elementary books in these characters. Their universal use would greatly tend to break down those barriers in language which perpetuate ignorance, prejudice, and disunion among nations.*

It is impossible to determine in a positive manner when and where the miraculous invention of the alphabet originated: the honour of its birth-place has been claimed by many nations. Among those which seem to have the greatest right to it, the learned diversely name Egypt, Phenicia, and India,—countries in which civilisation appears to have been of great antiquity. The most ancient alphabetical record of which we have as yet any knowledge, is the Pentateuch of Moses, written shortly after the departure from Egypt. This mode of writing, however, must have been in existence before the time of Moses; for he speaks of it as of a thing well known and in familiar use in his time.

Most languages differ in the form and number of their letters;

* See, on this subject, C. F. Volney's *L'Alphabet Européen appliqué aux Langues Asiatiques.*

but, notwithstanding this difference, the order which generally prevails in their alphabetical arrangement, and the analogy perceivable in their form, power, or names, seem to prove that they had one common origin. The Roman alphabet, which has been adopted in Europe, has a close affinity to the Greek, and the names of the Greek letters are easily recognised in those of the Hebrew characters, which bear themselves a close resemblance to those of many Eastern languages.

The Greeks, about 1500 years before the Christian era, received from Cadmus only 16 characters; but they afterwards successively added 8 at different periods, forming thus 24 characters, of which the Greek alphabet has consisted ever since. In some languages the number of letters is greater: the English, French, German, and Spanish have 26;* the Arabic has 28; the Persian, 32; the Turkish, 33; the Russian, 35; the Sanskrit, 50. In others, it is less: the Latin before Ramus, who introduced *j* and *v*, had 23 letters; three of which, *k*, *y*, and *z*, were used only in words adopted from the Greek; the Hebrew has only 22; the Italian, 21; and the Irish but 17, which are precisely those of Cadmus, with the addition of the Æolic digamma.

The most remarkable dissimilarity between the various alphabets of Europe consists in the difference of pronunciation attached to the same letters by different nations. The vowels, especially, although the same characters in the principal idioms, of Europe, are almost in all of them differently pronounced.

The state of ignorance in which nations were, at the time they adopted the Roman alphabet, did not allow them to supply its deficiency relatively to their vocal elements, and to establish a strict conformity between the orthography and the pronunciation of their respective languages. Besides, the separate origin of each people, their international relations, and the filiation of idioms constantly affected the written form and greatly tended to destroy that conformity.

A complete alphabet should have as many letters as there are sounds and articulations in the language; but this is far from being the case in our European idioms. The French and the English, for example, have each, in common with many other languages, only five vowels, although they possess, the former 15, and the latter, 13 elementary vocal sounds.

The alphabetical representation of the elements of pronun-

* We give 26 letters to the French alphabet, because the *w*, entering now into the composition of many French proper names, may be considered as a French letter.

ciation may be effected in three ways:—1. By making each character the distinct and constant sign of one vocal element exclusively. 2. By combining two or more of the characters already in use. 3. By attaching to one letter or combination of letters different sounds or articulations.

The first method is the most systematical and the most rational; if it were strictly adhered to in a language, it would establish the perfection of its orthography; but, in the present state of the alphabetical systems, considerable irregularity prevails in the correspondence between the written and the spoken language. Of the European tongues, the Italian is the least imperfect in this respect. The third mode of written representation is the most inconsistent and irrational; it is liable to produce perplexity in learning the language, and confusion in the expression of thought. French, German, and Spanish resort mostly to the first two: it is only by exception that some of their alphabetical characters admit of two sounds: thus, for example, in French, *â, è, é, i, ô, u, ou, an, in, on, un,* represent, each, one sound and only one: whilst *a, e, o, ai, au, ei, eu, oi, en,* although generally expressive of one sound, each take, some a second, and others a third, in a few instances which may be easily specified. The English language, on the contrary, is extremely variable in its mode of representing the vocal element; it indulges with the most unbridled license in the third mode of representing the articulate words; and, consequently, the irregularity of its orthographical system is perhaps greater and more perplexing than that of any other idiom (5).

That the same letters, few as they are, should suffice to produce so many different syllables and words in so many different languages, may on a first consideration excite wonder; but closer examination will remove this feeling. Leibnitz has calculated that the alphabetical characters would give a quadrillion of combinations, a number which is more than a million times greater than the amount of the words used by all the nations of the earth together.

Written languages differ as to the direction in which their characters are traced. Some Asiatic people, at one period, wrote their lines from right to left, and from left to right, alternately—a mode of writing called by the Greeks *boustrophedon* (ox-turning). Europeans have at all times written from left to right; the Greeks, placed between Europe and Asia, tried both systems, and about the time of Solon, fixed on the latter. The laws of this legislator were first written on the boustrophedon plan.

Persian, Sanscrit, and, with the exception of Ethiopian, the Semitic languages (Hebrew, Syriac, Chaldean, Phenician, and ancient Arabic,) preserved the direction from right to left. Different from these, some languages, among which may be mentioned the Chinese, Japanese, Mongolese, and Manchou-Tartaric, are written vertically, as was also the ancient Mexican. The alphabetical and horizontal writing from left to right is, at the present day, almost universally adopted.

CHAPTER II.

FOREIGN LANGUAGES (ANCIENT AND MODERN).

SECT. I.—BENEFITS ARISING FROM THE STUDY OF FOREIGN LANGUAGES.

THE history of languages has established this remarkable fact, that, in the course of time, as civilisation advances among nations, their original idioms are gradually abandoned for others less inflected, more simple, and more elliptical, which serve as vehicles of communication in ordinary life; whilst these original idioms, as the depositories of national and religious traditions, become classical and sacred symbols for the exclusive use of the learned, and especially the clergy. The mental culture which is promoted by the act of learning to understand these dead languages, and to use them for the expression of thought, tends also to make them the basis of intellectual education. This happens to be the case with the ancient idioms of the Jews, Copts, Chinese, Mongolese, Hindoos, Persians, and other Asiatic nations, as well as with some of the ancient European languages, and more particularly with the Greek and Latin, which have assumed a very extensive field of action in the education of youth.

Ethnography, the classification of nations founded on a corresponding classification of languages, has disclosed the existence of nearly two thousand languages, and five thousand dialects,* the greater number of which do not become objects of study, except in rare cases. Of this prodigious number of idioms a few extend over the surface of the globe, and divide, with Latin and Greek, the attention of students. Of these few, ten belong to Europe, namely, the French, English, German, Italian, Spanish, Portuguese, Dutch, Swedish, Danish, and Russian; and nine to Asia, namely, the Hebrew, Syriac, Arabic, Turkish, Armenian, Persian, Chinese, Sanskrit, the ancient language of India, and Hindoostanee, one of its modern dialects.

The mode of acquiring language varies with the peculiar

* See Adrien Balbi, *Atlas Ethnographique du Globe.*

circumstances of the learners, and according as it is a *native* or a *foreign* language. Nature provides abundant means of initiating us into the former; art must supply the method by which the latter is to be attained. What this art is forms the principal question which we propose to solve in the present work.

The term *foreign*, as we employ it in its widest sense, in contradistinction to *native*, applies to any other language, whether it be *ancient* or *modern*.

In the ordinary circumstances of life the *native tongue* is acquired by practice alone; the *foreign*, through the *native*, and by comparison with it.

The acquisition of a foreign language through the native, presents many advantages, besides the habits of attention, application, and patient toil, which it forms, in common with other intellectual pursuits. We have already adverted to the superiority of this department of instruction over mathematics, considered as a means of mental training: all its beneficial results will be unfolded as we proceed; but we shall here briefly sum up the most prominent.

1. *The study* of a second language inures to mental exertion, produces distinctness and accuracy in thinking, and elevates the youthful mind by bringing it into habitual communion with the minds of great writers; it evolves a quick apprehension, an acute discrimination, a patient process of comparison and analogy. It enriches the memory, expands the imagination, invigorates the judgment, and refines the taste in literary matters, by critical analysis of highly finished composition, the force and beauty of which cannot be adequately conveyed by translation. But it not only cultivates the mental powers by means of the various exercises requisite for the complete attainment of a language, it also exercises them in a manner perfectly analogous to their action in the ordinary course of life.

2. This study enriches the native vocabulary of the learner, and improves his power of composition in the national tongue, by practice in searching for native words and expressions to translate those of the foreign authors; while the peculiar excellences of these authors illustrate the principles which render language clear, forcible, and beautiful.

3. It turns our attention to the formation and connection of ideas, to the nature and mechanism of language; and, by constant comparison of two idioms, teaches general and particular grammar. Thus the acquisition of one foreign language facilitates

the learning of others, both from similarity of grammatical principles, and from the habits of study to which the mind is trained by that first acquisition.

4. It tends to engrave on the mind the subjects of which foreign authors treat, by the close attention required in translating them, and by the repetition necessary to impress their language on the memory. Hence, without losing sight of the main object, it brings under the consideration of the learners many useful branches of instruction, and lessons of morality. It is the ground-work of every species of human knowledge: the study of a science may, to a great extent, be said to consist in learning the true and full import of its nomenclature.

5. *The knowledge* of foreign languages multiplies the sources of information and intellectual enjoyments, by opening to its possessor new fields of science and literature; and, as it extends oral and written communication between men of different countries, it promotes the advancement of learning and the progress of the arts. If it were generally spread among nations, it would considerably facilitate their social, commercial, and political intercourse; and would thereby tend to unite them by the strong ties of mutual services and common advantage.

6. It extends our acquaintance with human nature by exhibiting, as elicited in their idioms, the peculiarities of character, custom, and civilisation of men in different latitudes. It brings under our notice many ideas and sentiments conveyed by expressions for which there are no equivalents in the vernacular tongue.

7. From the affinity which exists between different dialects, an acquaintance with the ancient idioms, especially, opens the rich fields of comparative philology, and leads to the solution of historical questions concerning the origin and filiation of nations, a philosophical investigation in which we have no other guide but the evidence of language.

8. Familiarity with foreign literature tends to destroy national prejudice, by unfolding, as sanctioned by enlightened communities, principles of conduct, morality, and politics, differing from those we have been accustomed to regard as exclusively correct; it guards us from attributing universally to human nature tastes, feelings, opinions, and motives of action which belong only to our age and country; it brings us nearer to truth by the examination, in different lights, of the various departments of knowledge; it enlarges our sympathies as it expands our minds,

and does away with that Chinese-like contempt for other nations, which is usually entertained by those whose sphere of thought does not extend beyond the narrow limits of their own experience. In short, exemption from prejudice, tolerance, and benevolence to all men, take the place of presumption, intolerance, and narrow-minded patriotism.

All languages are not equally favourable for effecting these various objects. The ancient idioms, for example, being now seldom used as vehicles of intellectual communication, do not present so extensive a field of usefulness as the modern, which are both spoken and written. Among the modern languages, also, many belong to nations whose backwardness in civilisation, and poverty in literature, render them but feeble auxiliaries in the acquisition of useful knowledge, the formation of taste, or the discipline of the mental faculties.

SECT. II.—ANCIENT AND MODERN LANGUAGES COMPARED AS BRANCHES OF INSTRUCTION.

The parallel which we propose to draw between the classical ancient and the modern languages of Europe refers solely to the advantages to be derived from them, considered as subjects of instruction. But, although we will not investigate the claims which either may have to superiority as vehicles of thought, we may observe, that, if the dispute which arose in France in the seventeenth century, respecting the comparative excellence of the ancient or of the modern writers, were now renewed, the immense progress made since by modern literature would secure to the modern languages a favourable position in the contest. For our part, we strongly incline to believe that England, France, Germany, and Italy now possess writers and orators who may successfully compete with those of antiquity.

The principal languages of modern Europe claim more attention than those of antiquity; because an acquaintance with them is useful to a more extensive range of persons, and to both sexes. The Greeks and Romans were, it is true, our first masters; they opened to us the road to the arts and sciences; but the progress which we have since made has left them far behind us in almost everything which can contribute to the improvement of society and the comforts of life. The works which they have transmitted to us have no direct bearing on the studies and duties of our

generation. Their languages contain but little of practical application and general interest at the present day: whereas those of modern nations are the depositories of a large amount of information, and of such information as is suitable to modern society and indispensable for its various pursuits. The usefulness of living languages will daily increase with the advance of science and the progress of discovery: the exchange of thoughts, of which they are the international medium for social, industrial, or scientific purposes, will henceforth be an inexhaustible source of public prosperity and advancement in civilisation.

The facts which the ancient historians record are less useful to us than those of modern history, because the truths deducible from them are less applicable in our times. The information communicated by the classics is also often inconsistent with our notions of civilisation, morality, or religion. By devoting the first period of life exclusively to them, young people are led astray in forming their standard of propriety on these points; so different from ours were the private and public life of the ancients,—their manufactures and commerce, their arts and sciences, their social state, political institutions, and religious worship. At the same time that the study of the poets, orators, and philosophers of Greece and Rome is generally admitted to possess a principle of intellectual development, it is undeniable that the Pagan sentiments and immoral tendencies of some of their writings render them often most dangerous to inexperienced youth. The selfishness of the Romans, and their unqualified hatred for other nations, may be mistaken for love of country; their aggressive wars and rapine, for true glory; and thereby tend to elicit in favour of injustice and cruelty the praise and admiration due to patriotism and virtue.

"The custom of teaching children to regard with the highest admiration the literature and history of the Greeks and Romans, stained with outrages on all the superior faculties of man, and of diverting their minds away from the study of the Creator and his works, has had a most pernicious effect on the views entertained of this world by many excellent and intellectual individuals. This is truly preferring the achievements of barbarous men to the glorious designs of God; and we need not be surprised that no satisfaction to the moral sentiments is experienced while such a course of education is pursued."*

At the revival of learning, ancient literature was to the people

* Geo. Combe, *Constitution of Man.*

a rich mine, from which they could supply their scanty idioms; but, now, the character of the principal languages of Europe having been fixed by the genius of their great writers, no longer permits the adoption of foreign phraseology. The introduction of Latinisms into English or French would be as improper as the introduction of Anglicisms or Gallicisms into Latin. Whatever be the excellence of ancient classics, the study of them, as models of composition, must therefore be pursued with great caution. Those who have studied them most assiduously often speak and write their own language very incorrectly. We shall bring our style in the native tongue to greater purity by studying our best national writers, than by the exclusive application to the volumes of antiquity.

A knowledge of Latin affords little assistance in the acquisition of English; for not only is the difference of construction an obstacle to the one being made the standard of the other, but the Latin derivatives which the English language contains are, in comparison with those of Saxon origin, in a decided minority. The absence of analogy between the Latin and the English is particularly remarkable in the fundamental principles of their grammars. The predominating character of the English language, both in its grammatical and idiomatical structure, is essentially of Saxon origin. Its inflexions have generally the same source: the English genitive, the mode of forming the plural of nouns, the terminations by which are expressed the comparative and superlative of adjectives; the inflexions of pronouns, of the second and third persons, of the preterites and participles of verbs; and the most frequent terminations of the adverbs, are all Anglo-Saxon. The manner of expressing the moods and tenses of verbs, the auxiliary words used for that purpose, and the words which most frequently occur, articles, pronouns, adverbs, prepositions, and conjunctions, are almost entirely Saxon. It is in this ancient dialect of the great Teutonic family that the history and genius of the English language are to be studied.

It is not, however, in these respects alone that classical literature has lost in usefulness: it is deficient most in effecting what should be the practical results of instruction,—knowledge of things and facts, acquaintance with the laws of nature and of the mind, consciousness of our duties and our rights; it does not even confer the power of receiving or conveying ideas. Latin would be, at the present day, a most inconvenient medium of

communication; because the progress of civilisation has introduced in modern arts and sciences, in commerce and manufacture, in our modes of life and social relations, a wide range of ideas for which that language has no corresponding terms.

If the word *learning* means obsolete vocabularies and antiquarian lore, it may indeed be applied to ancient literature; but if, as we believe, it means science, history, philosophy, literature in general, it is the extreme of absurdity and quackery to apply the term to the acquisition of Greek and Latin, and to call these languages *learned*, when scarcely any kind of available information can be obtained through them. Those alone are truly *the learned languages* which are depositories of useful knowledge. Almost all the Greek and Latin works which contain information of any value have been translated, and are thus accessible to persons ignorant of those languages; but from the modern press there are issuing daily, in various countries, works of merit in every branch of literature, and in every department of knowledge, many of which ought to be read as they appear. No physician, chemist, or engineer,—no scientific man, in fact, can attain to eminence, or even keep pace with the progress of science or art, who cannot avail himself of the discoveries and improvements made by other nations on subjects relative to his pursuit. Living languages are indispensable to travellers, merchants, and statesmen, to consular and diplomatic agents, to naval and military men,* to the man of fashion, as to the man of science; whereas the usefulness of the ancient languages, viewed either as stores of knowledge, or as means of communication, is at the present day very limited.

Utility is the test by which the value of instruction ought to be estimated; and the study of words is useful only so far as it leads to the acquisition of things. "Language," says Milton, "is but the instrument of conveying to us things useful to be known. And, though a linguist should pride himself to have all the tongues that Babel cleft the world into, yet if he have not studied the solid things in them, as well as the words and lexicons, he were nothing so much to be esteemed a learned man as any yeoman or tradesman competently wise in his mother dialect only."† Those languages should be preferred which afford the most abundant means of gaining knowledge. A second

* Captain Basil Hall recommends, in very strong terms, to young sailors, the study of living languages. See *Fragments of Voyages and Travels*, First Series.

† *On Education*, to Sam. Hartlib.

language is not of itself knowledge; it is only an instrument for obtaining and conveying it. Having two words for everything, —two ways of expressing every idea, does not constitute real information. He who knows ten names for a plant is less informed than he who has only one name for it, but is acquainted with ten properties of it. The time which is given to the study of words is often taken from the study of things: hence it is not rare to find persons masters of several languages who, notwithstanding, are very ignorant (6).

SECT. III.—ON THE STUDY OF EASTERN LANGUAGES.

Although the languages of modern Europe excel all others, considered as depositories of knowledge, they yield to those of antiquity and to Asiatic idioms as means of philological research. Eastern languages are, in this respect, particularly interesting, and deserve the serious attention of the learned who are desirous of investigating the filiation of languages and of nations; for the original idioms in which Oriental learning is veiled afford the strongest evidence that the East is the cradle of Western civilisation. Acquaintance with those which belong to the great family of the Indo-Germanic, or rather Indo-European languages, would throw light on the origin and structure of Latin and Greek.

The study of the Asiatic idioms would also lead to a knowledge of the early psychological condition of man, as illustrated by the formation of language; because these idioms have, for the most part, been subjected to less mixture of dialects than those of Europe, and, owing to the proverbial immobility of the people who speak them, have undergone few of those modifications which the progress of civilisation necessarily brings: they, in fact, bear the stamp of the human mind.

The Sanskrit, one of the most finished idioms that ever existed, is peculiarly favourable for philological investigations. "This language," observes Sir W. Jones, "whatever be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either; yet bearing to both of them a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly have been produced by accident; so strong, indeed, that no philologist could examine all three without believing them to have sprung from some common source, which perhaps no longer exists."*

* *Third Anniversary Discourse.*

The Semitic idioms, or Hebrew family, are also highly deserving of attention, as exhibiting that peculiar character of thought and expression, with which one should be conversant to understand critically the real import of the Holy Scriptures. Philology affords valuable aid to theology.

The study of Eastern languages is perhaps more encouraged by the government of France than it is by that of Great Britain; but in neither country does it meet with the attention it deserves, because its importance is not yet sufficiently appreciated. Of one hundred Latin and Greek scholars there are not two who inquire into Sanskrit etymologies, or who know anything of the affinities which connect the various dialects of the great Indo-European family.

The learned who will attend to this department of knowledge, and, especially, to the literature and philosophy of ancient India, will find the study fraught with useful and interesting results. The great philological discoveries which have latterly arisen from it promise a rich harvest for the reaping of which every facility is offered. Private and public libraries are now filled with precious manuscripts, for which we are indebted to the erudition and patient research of modern Orientalists. Alphabets and grammars of innumerable tribes are brought to light by the indefatigable zeal of navigators and missionaries; and typography reproduces, in the principal capitals of Europe, the most ancient monuments of the literature of the East.

Oriental languages are, at the present day, invested with peculiar interest, and cannot fail, henceforth, to be more extensively cultivated in Europe; because they will prove beneficial as means of international communion, not less than as sources of philological knowledge. There is yet some glory to be gained in the advancement of knowledge, and a duty to be performed towards the well-being of humanity, in exploring the seats of ancient civilisation. Their history and literature, their arts and sciences, their laws and forms of government, are as yet but imperfectly known. It would be desirable to unveil the secret of their rise and decline, to ascertain what are, at the present day, their agricultural and commercial resources, their mineralogical and archæological riches; finally, to solve numerous questions on the origin, traditions, and languages of the various tribes spread over Asia and Africa.

The present time is particularly favourable for all these important inquiries. The occupation of the North of Africa by

the French, the progress which Egypt has lately made in civilisation under Mehemet Ali, the prosperity of the English and Dutch possessions in India, and the opening of the Celestial Empire to all nations by the valour and liberality of Great Britain, are calculated to draw diplomatic agents and merchants, as well as inquisitive travellers and the learned, to the different seats of the Semitic, Indo-Persic, and Chinese literatures. Steam, which will shortly connect the Mediterranean with the Asiatic Sea, and the Atlantic with the Pacific Ocean, will considerably multiply the intercourse between the Eastern and the Western world. Let, then, the Oriental and Semitic idioms be seriously attended to; they will, in many cases, be more practically useful than Latin and Greek.

SECT. IV.—MODERN LANGUAGES CLAIM PRECEDENCE OVER THE ANCIENT.

If we consider the time of life at which a foreign language may be learned, it will be found that the living idioms should be given precedence over those of Rome and Greece. They can be commenced at a much earlier age; for their acquisition, greatly depending on practice and familiar intercourse with those who speak them, suits childhood much better than the exclusive application to books indispensable in the study of the ancient languages.

But, were even the study pursued altogether through the medium of books, modern languages could still be acquired at an earlier period than the ancient; for they abound in juvenile works, which, in point of style and information, may be adapted to every stage of early life, and thus afford young people the means of pursuing their studies with pleasure and benefit in various branches of instruction. Ancient literature, on the contrary, is destitute of such compositions: its volumes are far above the comprehension and tastes of children, and seldom contain information suitable to them; they treat of events so remote, and allude to customs so different from those with which we are acquainted, that they cannot be fully understood, nor can they afford much to interest young minds.

Modern languages, as depositories of knowledge, should be commenced sufficiently early to be made, in due time, instrumental to the study of the sciences and of every department of

intellectual education. This would prove particularly advantageous as regards the French language; because many of its scientific works are made subjects of study in superior and professional instruction, both in England and other countries.

We may add, as a farther reason for giving precedence to the study of the living languages, that a longer period is required for gaining a complete knowledge of one of them, than for the acquisition of either Latin or Greek; because, although generally easier, they present a greater number of elements and ultimate objects to be attained. The modern languages which hold the first rank at the present day embrace a larger collection of terms and idioms than are to be found in the ancient; for the materials which constitute the riches of a language always bear proportion to the acquisitions in knowledge and progress in the arts made by the people. The least copious among the principal European idioms contains 50,000 words; Latin, as transmitted to us in the classics, has hardly half that number.* The great dissimilarity in the pronunciation of the living languages throws in their acquisition a difficulty from which Latin is free, since it is pronounced in every country similarly to the national tongue. The living languages must be spoken as well as written, and understood in conversation as well as in books. All this demands much more time and industry than merely acquiring the power of reading a dozen Latin and half-a-dozen Greek volumes, in which the scholastic course chiefly consists. The ability to read fluently and critically the Latin classics could, with diligence, attention, and a proper method, be gained by an adult in less than three years—many persons have effected this object in a much shorter period;—but double that time would be insufficient for acquiring the power of speaking any living language as a well-educated native, even under the most favourable circumstances.

* The French and the Italian languages contain each over 50,000 words. English possesses a more copious vocabulary than either, from the proneness of the people to borrowing words from other idioms, particularly from the French, and from the facility which it affords of forming compound expressions. As regards this latter source of copiousness, the German language greatly surpasses the English; for its nomenclature may be almost indefinitely increased by additions to its radical words. The last edition of Todd's Johnson contains about 58,000 words. The American, N. Webster, gives 70,000 in his Dictionary; the *Imperial Lexicon*, now in process of publication in Edinburgh, will contain, as stated in the prospectus, 80,000. In these numbers are not included the different modifications of variable words, the designations of places, or other geographical denominations, nor the names of all animals and plants. Of the latter alone, the French naturalist Decandolle has reckoned above 80,000.

The study of living languages, as a means of inuring to mental labour, may also render to the young most valuable service; although, as will subsequently be seen, Latin is, it must be admitted, better calculated for this purpose. The principal languages of Europe open wide fields for the exercise of memory, since their numerous elements—the words and phrases—must be thoroughly retained for the expression of thought. Any one of them can serve to initiate learners into the science of grammar, improve them in the vernacular tongue, as also to assist them in their subsequent studies of other idioms; and can, in fact, be learned both as a means and as an end, whereas Latin is only learned as a means.

Benjamin Franklin, who had only one year's instruction in Latin, when very young, acknowledges that he afterwards neglected that language entirely; but having, in manhood, gained an acquaintance with French, Italian, and Spanish, he was surprised, he says, to find, on looking over a Latin Testament, that he understood it better than he had imagined. He adds, "I would offer to the consideration of those who superintend the education of our youth, whether, since many of those who begin with the Latin quit the same after spending some years without having made any great proficiency, and what they have learned becomes almost useless, so that their time has been lost, it would not have been better to have begun with the French, proceeding to the Italian and Latin. For though, after spending the same time, they should quit the study of languages, and never arrive at the Latin, they would, however, have acquired another tongue or two, that, being in modern use, might be serviceable to them in common life." *

The acquisition of Latin is not only confined to very few practical objects, but, few as these objects are, their attainment can never be complete. The best scholars must confess that there are many passages in ancient writers which they neither do, nor ever can, comprehend; and, in such passages, the language fails as an instrument of mental culture. Latin composition cannot either be practised with a view to much intellectual benefit; for no one can pretend to write in a dead language with ease, purity, and consistency of style. It is contrary to reason to suppose that any one could now perfectly understand, much less speak or write, the language of a people who ceased to exist more than fifteen centuries ago, and who have left us but vague

* *Autobiography.* Edited by Sparks. Ch. vii.

notions of their genius, laws, arts and sciences, of their national character, habits of thought, and familiar mode of life—all things on which a language mainly depends.

Languages, learned for the purposes of social intercourse and the practical business of life, must be more thoroughly and extensively known than those which are only to be read. With knowledge of a modern language equivalent to that which constitutes an accomplished Latinist of the present age, one would be considered as knowing it but very imperfectly. The good Latinity of the classical scholar passes current only because the true standards of excellence—the orators and writers of Rome—cannot come forward to show the fallacy; whereas the literary men of modern nations place in a manifest inferiority their foreign cotemporaries who speak and write their languages. A well educated person, knowing his native idiom considerably better than the best classical scholar could know a dead language, has it in his power to convey more extensive and more certain information in it, than could be obtained in Latin from any modern Latinist. He may, if allowed sufficient time, carry his pupils to the higher departments of oral and written composition in his native tongue—objects utterly unattainable, at the present day, in the ancient languages.

From these various reasons it may be concluded, that the study of modern tongues ought to be commenced sooner and continued longer than that of the ancient.

SECT. V.—THE FRENCH LANGUAGE, AS A GENERAL MEDIUM OF COMMUNICATION.

The adoption of one language as a universal medium of intellectual communication could not fail to extend our social intercourse and render international communion more frequent and beneficial; it would accelerate the progress of civilisation, facilitate mercantile transactions, promote the advancement of art and science, efface national prejudices; in short, it would consolidate the bond of peace and union between the members of the great human family.

Never was a common means of intellectual communication more needed than at the present day. Such is the spirit of the times that the members of different communities fraternise under the influence of similar institutions, similar pursuits, and similar

tastes. Nationalities merge into one great family: they are no longer separated by seas and mountains; steam navigation, railroads, and the electric telegraph bring into contact the most distant countries. The cheapness of travelling, the reduction of postage, and the free circulation of the public press, which will soon be extended from England to all civilised nations, will, not less than the rapidity of conveyance, bring them into closer intimacy with each other, and thus aid in divesting them of national antipathies and prejudices. The old barriers which ignorance, monopoly, and a want of international intercourse had raised between them, are now, in spite of the apparent hostility of political parties and narrow-minded patriots, crumbling in every direction before the irresistible power of a generous and enlightened philanthropy. A congress composed of the purest friends of humanity proclaims peace and brotherly love to all men; and scientific associations call successively into the great seats of industry the intellectual representatives of the civilised world. Isolated labour is everywhere and for every purpose giving way to the spirit of association: instead of wrapping their discoveries in secrecy, men of all countries diffuse them as means of universal advancement. The competition of human industry which Great Britain has, in 1851, so liberally and successfully called forth, marks a new era of international communion: by creating among the nations of the earth a generous emulation in art and practical science, it has imparted a powerful energy to civilisation, and cemented the great pact of universal fraternity and mutual good will. Men, until now bitter foes, meet on friendly ground and vie with each other in advancing the great interests which concern mankind. This happy tendency towards close union among nations is further shown by the growing taste which they evince for the study of each other's language; but the adoption of one common idiom among them would do much towards securing this most desirable union.

Convinced of the manifold advantages which accrue to society from the universality of one language, the educated classes in the Roman empire studied Greek, which was then in extensive use in the civilised world. At the revival of letters, and for a long period after, European nations made Latin a common medium of communication; but, at a later period, they seem to have agreed on granting that privilege to the French. A happy concurrence of circumstances contributes to justify this

preference. The uniformity and simplicity of its construction, added to its unequalled precision and perspicuity, make it the fittest for conversation; the facility and clearness of its pronunciation, resulting from the fixity of its prosody and from a fair proportion of vocal sounds and articulations, render it equally attainable by southern and northern nations. The central position which France occupies in Europe, the beauty of her climate, the courtesy of her inhabitants, and the liberality of her institutions, make the country the general rendezvous of nations; her high state of civilisation, her moral influence in Europe, her political power, her military glory, and even her misfortunes, which, at different periods, have forced many of her most eminent men to emigrate, all tend to diffuse her language over the civilised world.

French is, in this country especially, an indispensable branch of a liberal education; it is accessible to either sex, and useful to every class of society; it is one of the richest in scientific and literary productions, and is perhaps the most abundant source from which the English tongue has borrowed, and continues to borrow. Moreover, it is the language of a people whose history is most intimately connected with that of England, whose country the English visit more than any other, and in which they find manners, arts, and civilisation, most nearly approximate to their own. These two nations, advancing together at the head of civilisation, and enjoying similar political institutions, are united by the same interest, the same desires, the same hopes; they honour the same virtues; they admire the same talents; they will be, for the future, united in the same dangers and in the same philanthropic views, for the liberty, peace, and happiness of the world: they now only want one common language.

The most civilised nations of modern times, in adopting many of the customs and arts of the French, have borrowed and naturalised a great portion of their vocabulary. This circumstance renders the knowledge of the language a help in acquiring other modern dialects. Its great affinity with the Latin, from which, in common with Italian and Spanish, it is principally derived, must also facilitate the learning of that ancient language.

There is little probability, however, that French can ever supersede all other languages, and become really a universal medium of communication: although very general among

civilised nations, its use will perhaps long continue to prevail, more particularly in Europe. English, which has been extensively diffused in other parts of the earth, and which the commerce of England and America will cause to be heard farther and wider every day, should share with French the attention of students throughout the civilised world. Were it not for the extreme irregularity of its pronunciation and orthography, the study of it would present great facility to foreigners: it has few inflections and conjugational varieties; it is extremely simple in its grammatical structure and logical arrangement; its vocabulary is copious, and the capabilities for adding to it are unbounded. "Less musical, indeed, than the languages of the south," says Macaulay, "but in force, in richness, in aptitude for all the highest purposes of the poet, the philosopher, and the orator, it is inferior to that of Greece alone." This language would afford to the French advantages equal in every respect to those which a knowledge of French would confer on the English. In any case, practical acquaintance with both would secure the powers of communicating with a large portion of the inhabitants of the globe.*

SECT. VI.—ADVANTAGES PECULIAR TO LATIN AND GREEK.

The Greeks and the Romans amply made up for their extreme deficiency in the sciences by their taste in the fine arts, and the exquisite finish of their literary productions: hence their languages afford advantages which cannot be denied. The noble specimens of history, oratory, and poetry embodied in them, present the fairest models of composition; the excellences with which they are replete effectually cultivate and polish the taste of students in all literary subjects; whilst the habit of explaining and analysing thoughts relative to a state of society so different from the present, inures to intellectual research, and calls into action reflection, imagination, and judgment. The peculiar system which characterises the grammatical structure of those languages, the distinctive terminations of the same species of words, and the changes of these terminations, incident to the various circumstances in which they are used, as well as

* See *De l'Universalité de la Langue Française*, by Rivarol; *Essai sur l'Universalité de la Langue Française*, by C. N. Allou; *Dissertation sur les Causes de l'Universalité de la Langue Française*, by Schwab, translated from the German by Rebelot.

the infinite diversity of collocation arising from these changes, afford to learners favourable opportunities for prosecuting their study of the native tongue, for acquiring the principles of general grammar, and exercising the mind in philological investigations. Being also the source from which several modern languages are derived, and from which the technology of science is formed, they facilitate the acquisition of those languages, explain scientific nomenclatures, and open a wide field for etymology.

Another great advantage arises from the study of ancient literature: the native tongue of the classical professor being usually that of his pupils, he can, in general, make Latin and Greek subservient to their improvement in it more effectively than could be done through living languages by foreign teachers. The native instructor can best teach the national tongue by comparison with Latin and Greek; he can best exhibit its grammar, genius, and power, and explain what constitutes propriety and precision of terms, grace and correctness of expression, force and perspicuity of style. At the same time, it is to be regretted that this cannot always be done through languages more useful in after-life.

Although English, French, Italian, and German, may perhaps compete with the ancient languages in power, elegance, and clearness of expression, and far surpass them in the number and the importance of the benefits which they can confer through life on their votaries, yet we readily admit that they can never supersede them. Were such a change to take place, foreigners, becoming, in consequence, the most competent professors in what would then be the leading departments of collegiate instruction, and the best judges of literary merit, must be placed at the head of academical establishments, and invested with the highest university honours. This would be a complete anomaly, a state of things altogether inconsistent with the existing forms of communities, and repugnant to national feelings.

But what should reconcile us to the ancient languages is, that, being now beyond the influence of caprice, so long as they are made the ground-work of classical studies, and the test of excellence in literary composition, they will tend to check the constant fluctuation of the living languages. The Greek and Latin classics are in literature what the works of the old masters are in painting. Love of novelty may, for a time, draw modern

nations from the true principles of taste: study of the immortal monuments of antiquity will always bring them back to the right standard.

Let it not be said that the benefits expected from classical literature could be equally obtained from good translations. The substance of the historical, oratorical, or other didactic works of the ancients may, it is true, be conveyed in faithful translation; but the pith of their expression can never be conveyed. In imaginative composition, especially, the very form in which the classical writers moulded their creations is nearly as essential as the substance; and that form cannot be transferred into another language. No interpretation of the standard classics can give an idea of their energy, or of their peculiar graces. A translation may be full of beauties; but they will be of a different character from those of the original. By translation, the harmonious arrangement of words, the excellences of style, are lost, especially in poetical productions, which become sometimes unintelligible and nonsensical. The impossibility of transfusing into one language the beauties of another makes a translation unfit as a model: original works should always be preferred. Seldom have the most celebrated and the most admired works of any nation obtained, in the translation, popularity equal to that which they enjoy in the original. This is particularly the case with the literary master-pieces of antiquity.

Ancient languages must continue to occupy a large share of attention in the intellectual education of boys destined for pursuits which depend on literary acquirements. It is a narrow view to consider them as useful only to the learned professions. Acquaintance with them is beneficial not only to the clergyman, the physician, and the lawyer, but also to the archæologist, antiquarian, statesman, philosopher, and man of letters; for they are the interpreters of ancient monuments and coins, the original receptacles of our laws and of ancient doctrines, the inexhaustible sources of our modern dialects, and the bonds which mentally connect the modern European nations with one another and with antiquity.

Classical literature must be studied in proportion to the influence it has had over modern civilisation. This study ennobles the mind by elevating it above the trivial pursuits of ordinary life, and affording means of intellectual culture. Let us never forget that, through the writings of antiquity, the ideas of freedom entertained by the republics of Rome, Athens, and

Sparta, have cast deep roots among the enslaved people of modern Europe; and liberty has left her ancient temples to place herself at the head of civilisation. The general study of the ancient languages will preserve these feelings in the hearts of men, and will associate liberty with education. "Classical studies maintain the sacred tradition of the intellectual and moral life of humanity."*

* V. Cousin, "*Rapport sur l' Instruction publique en Allemagne.*

CHAPTER III.

INADEQUACY OF THE ORDINARY SCHOLASTIC COURSE.

SECT. I.—BRANCHES OF KNOWLEDGE CONSTITUTING A COMPLETE COURSE OF INSTRUCTION.

IMPORTANT as is the study of ancient literature, it should not exclusively engross the period of scholastic instruction. Even those who are intended for the learned professions require information besides Latin and Greek; and yet, it must be acknowledged, that, with the exception of elementary mathematics, little else is taught in classical schools. It would seem that the classics alone are essential; and that the arts and sciences, morality and religion, are only accidental in education.

If we wish to educate young people, supply them with means of success in future pursuits, and make them useful members of society, we must direct their attention to branches of knowledge which are required in the various avocations of social life. These avocations are now so multiplied and present so wide a field for competition, that the preparatory studies which they demand, and which are often very extensive, cannot be commenced too soon or pursued too earnestly.

Among the departments of knowledge which, in the natural progress of civilisation, have assumed a high degree of importance, and ought now to be placed on a par with the ancient languages, some are indispensable to those who wish to rise to eminence. The following are the principal branches which should enter into the programme of respectable schools: they are introduced here without reference to their relative importance, this being determined by the future vocation of the learner.

1. A thorough knowledge of the *national language*, which, with the cognate branches, *grammar*, *rhetoric*, and *logic*, is the source of every intellectual enjoyment and of success in every learned pursuit.

2. *The modern languages*, a practical knowledge of which, as

already stated, extends our means of information and intellectual communication, and the comparative study of which affords many advantages in common with that of the ancient.

3. *Pure* and *mixed mathematics*, which train to habits of close and exact reasoning, at the same time that they lay the foundation for investigating and comprehending the laws of the material universe.

4. *Natural history, physical geography, natural philosophy, chemistry*, and *physiology*, which make man acquainted with the phenomena of nature and their relations to his organic constitution.

5. *Political geography, modern* as well as *ancient history, political economy*, and *the form of government* of our country, which teach the principles on which society rests, and its relations to our moral nature.

6. The principles of *law* and *legislation*, which initiate into a knowledge of social duties and political rights, and into the functions which may devolve upon us as members of a constitutional state.

7. *Moral* and *intellectual philosophy*, and especially *the science of education*, which enable us to employ our faculties to the greatest advantage, and direct those of our children.

But far more important than all these elements of a liberal education, is *the Christian religion*, which is the only safe foundation for the educational course: it leads to the knowledge of God, the observance of His commandments, the fulfilment of all our duties, the practice of every virtue, to happiness in this world, and to the blessings of immortality. The academic establishments, more especially, which receive boarders, and are consequently the representatives of the family, are called on to give to their young charge moral and religious, as well as intellectual education; they should teach them both the doctrines and the practice of religion.

This programme of studies we claim for our youth, in the name of civilisation and of the intellectual progress of humanity. Few of these branches have obtained the share of attention to which they are entitled; and several of them have not even received admittance in many academical establishments. The natural and experimental sciences, in particular, ought to be more generally cultivated than they now are. Although of comparatively modern origin, they rank high in the scale of knowledge, whether we consider their usefulness, the comprehensiveness of their aim, or the unerring certainty of their principles. No scientific

pursuit has more largely than natural philosophy, and its handmaid, chemistry, supplied the wants and luxuries of life, promoted the health and comforts of the human race, and contributed to the improvement of agriculture, manufactures, and the arts of modern civilisation. The sciences which reveal the laws and phenomena of nature possess this inestimable advantage in the education of youth, that their study presents striking and endless manifestations of the infinite power, wisdom, and benevolence of God.

The external world of material objects displays the power of the supreme Architect who created it, not less than the internal world of thought. Matter and intelligence are the inseparable elements of one grand whole. It is, in fact, by the contemplation of the former that man can exercise and unfold his portion of the latter. Nothing is better calculated to enrich the mind and to elevate the soul than the attentive consideration of those admirable principles of nature, which diffuse everywhere an indelible character of order and beauty, proclaiming unity of design, in variety infinite, and manifesting the divine impress of the Creator. Nothing is so capable of exciting human inquiry to continual activity as these sublime problems of nature, the solution of which opens wider fields of thought with every new discovery, and exhibits the relations which exist between the physical and the moral world.

Due attention to the various departments of knowledge above mentioned would enrich the mind with a copious stock of useful ideas. From the inexhaustible mine of natural history and the physical sciences, endless illustrations, allusions, comparisons, and images may be drawn, which would render native composition more attractive and more useful; whereas, from the narrow path of classical literature, and from its exclusive pursuit, poets and orators are sometimes led into egregious errors, when they allude to modern sciences or the laws of nature.

SECT. II.—STUDY OF THE NATIVE TONGUE, AS A PART OF NATIONAL EDUCATION.

The national tongue should hold in the instruction of youth a pre-eminence which, until now, has been denied to it; for it is more particularly the instrument of the mind's operations, the record of its stores, the manifestation of our feelings, our

affections, our intellectuality. Its writers and orators, its genius and resources, should, among a people careful of their own dignity, occupy young persons from the earliest to the latest period of scholastic instruction. It is in that tongue they should be taught to think, to speak, and to write. To it belongs, by right, the prize of excellence adjudged by universities to the Latin language. It should, in this country, be considered more honourable, as it is more consistent and more useful, to speak and write English like Edmund Burke or Walter Scott, than Latin like Cicero or Tacitus.

A knowledge of the native tongue beyond mere grammatical accuracy, and beyond the ordinary powers of conversation and familiar letter-writing, is useful in every position in life: to legislators, statesmen, lawyers, clergymen, professors, and all public functionaries, it is an essential element of qualification for their respective pursuits. It is indispensable to naval and military men, who must frequently write reports to their superiors and address the troops under their command, to merchants who have commercial relations to maintain, to members of associations, or societies, who may have opinions to defend in the presence of contending parties, and to all those who, being entrusted with the management of public works, or the interests of their fellow-citizens, have to propose measures, or render an account of proceedings. It is particularly necessary to those who have attained eminence in the arts and sciences, or who have made discoveries which may be beneficial to society. There can be no doubt that many important schemes and inventions have been lost to the world, owing to their authors being unable to set them forth with advantage.

Powers of oratory and composition, joined to an acquaintance with civil and political rights, will prove useful in the course of life, especially in free and representative countries, wherein every one may be called upon publicly to express opinions, and to fulfil municipal or political duties. As knowledge and intelligence become more general, the people, in asserting their rights, appeal every day less to physical force and more to reason: in public as in convivial meetings; in the affairs of the state as in the business of ordinary life; in debating international questions as in discussing private interests, he who speaks or writes the best will always accomplish his design, and gain an ascendancy over his fellow-men. Nearly all the great reforms and revolutions which, for the last sixty years, have taken place in Europe,

have been achieved by the force of eloquence. Speech is power: the great end of literary education ought to be to confer and direct this power—the most useful, the most delightful, and the most wonderful of human acquisitions.

The aid afforded by the study of the ancient languages for improvement in the native tongue through which they are learned, is not sufficient; assiduous attention to the great national models is indispensable for securing a complete knowledge of it. The ordinary system of classical instruction does not furnish adequate means of advancement in the vernacular tongue. Depth of learning in ancient literature is far from being the test of excellence in the national language. How many good Latinists there are who cannot address their fellow-citizens with that ease and in that style which are expected to result from a literary education! He to whom practice has given extensive command of language—his own language—not that of Greece or Rome—to whom nature has granted the imaginative faculty which rapidly embraces the remotest and the nearest relations, who is endowed with the reasoning power which analyses, arranges, and condenses, who knows the human heart and human affairs,—that man is the orator. Good speakers and good writers would not be so rare, if as much time were bestowed on the study of the native tongue, as is generally devoted to Latin; if, from the lowest to the highest class in our schools, the national classics shared equally with the ancient the attention of students, and if the mind, duly cultivated, were enriched from their contents.

Knowledge of the native tongue may be carried to a high degree of excellence independently of Latin and Greek. Byron was a mediocre classical scholar; he attended the course of studies at Harrow school with dislike and carelessness. He acquired his astonishing copiousness, flexibility, and beauty of expression, by extensive miscellaneous English reading.* Madame de Staël and many other celebrated female writers reached the highest walks of literature without previous study of Latin. Richardson and Robert Burns, Bernardin de St. Pierre and Béranger, learned neither Latin nor Greek. Shakspeare is generally supposed to have been ignorant of a foreign idiom, although some persons believe he understood a little Latin; but to that little, if it be so, it is obvious he owed not his mastery of English. No one will deny that the Greek writers

* Thomas Moore, *Life of Byron*.

and orators were skilled in their own language, and yet they learned no other in their youth.

"It is a reproach on British education," says G. Jardine, "that, whilst the minutest parts of the ancient languages are taught, and occupy a considerable portion of the time allotted for study, both at school and in college, the language in which we ourselves speak and write receives comparatively little attention."* "As the sole business of life," observes Sir Edward Bulwer Lytton, "is not literature, so education ought not to be only literary. Yet, what can you, the father of the boy you are about to send to a public school—what, I ask, can you think of a system which, devoting the whole period of youth to literature, not only excludes from consideration the knowledge of all continental languages—the languages of Montesquieu and Schiller,—but also totally neglects any knowledge of the authors of your own country, and even the elements of that native tongue in which all the business of life must be carried on? Not in Latin, nor in Greek, but in his English tongue, your son must write; in that tongue, if you desire him to become great he is to be an orator, a historian, a poet, or a philosopher. And this language is, above all others, the most utterly neglected, its authors never studied, even its grammar never taught. To know Latin and Greek is a great intellectual luxury; but to know one's own language is an intellectual necessity."†

The error of the ordinary system of public instruction lies in being too classical rather than too literary. Literary education does not consist so much in an acquaintance with Latin and Greek classics, as in a familiarity with modern literature, and especially in critical knowledge of the national idiom, and superiority in the art of expressing thoughts in it, either in speaking or writing. These literary acquirements are as indispensable to the man of science as scientific and general information to the man of letters; for of what use would knowledge be to the one, if he could not readily and clearly convey it; and of what use would the power of expression be to the other, if he had no useful and practical ideas to communicate? Scientific and literary education ought to be inseparable.

* *Outlines of Philosophical Education.* † *England and the English.*

SECT. III.—CLASSICAL INSTRUCTION LIMITED IN ITS BENEFITS AND INADEQUATE TO THE WANTS OF MODERN SOCIETY.

The advantages which may arise in active life from the various branches of knowledge above mentioned are obvious. Those which may be derived from Latin and Greek are, if we except the mental discipline effected in learning them and the means which they afford of studying the national language, very inconsiderable. In adverting to classical instruction, Adam Smith observes, "It seldom happens that a man, in any part of his life, derives any conveniency or advantage from some of the most laborious and troublesome parts of his education."* And yet those languages usurp the almost exclusive right of occupying, for eight or nine years, the rising generation, those on whom the country places her hopes of advancement in the different pursuits which contribute to her wealth, prosperity, and glory. That system is radically bad which casts in the same mould the physician and the engineer, the lawyer and the merchant, the soldier and the agriculturist, the clergyman and the statesman.

Not only do the dead languages present but little chance of being applied to any useful purpose in after-life, but the mental training which their acquisition may promote, although of a high character, cannot supply all the intellectual wants of society. The discipline which arises from the comparative study of foreign languages leads to particular attainments, which, valuable as they are, ought not to be the only objects of ambition in intellectual education. Different courses of mental training are required to prepare the mind for the scientific, military, and industrial professions, from that which is calculated to produce great scholars. The habits of the mind formed by the study of Latin and Greek have contributed but little in raising to eminence those who hold the first rank amongst monarchs, warriors, navigators, engineers, agriculturists, manufacturers, merchants, or artists. It is not these languages which have brought out the mental energy of the great benefactors of mankind, of those who, by their inventions and discoveries, have increased, and daily increase, the power and well-being of man.

The time given in most classical schools to the national tongue, or to anything beyond the ancient languages and mathematics, is, indeed, very inconsiderable. The mnemonic exercises

* *Wealth of Nations.*

on the national grammar, on geography and history, and the instruction on the natural and experimental sciences, which are occasionally introduced, may satisfy those who have not reflected on what constitutes good education ; but they do not supply the real wants of the generality of learners, nor do they enable them to fulfil the expectation of society concerning its future members. Every information, in fact, beyond the classics is secondary : it is attended to with indifference, and often with ill-will ; it is studied merely as a matter of form, and to save appearances. This exclusive attention to ancient literature, by indirectly contemning the native and foreign living idioms, leads young people to disregard their national and other modern classics. It narrows their minds, and destroys their individuality, by making them the servile imitators of the ancients.

Under the influence of these antiquated notions, a young man, after the period of scholastic education, is ushered into the world with a smattering of one or two dead languages, and with but scanty knowledge of his own ; with vague notions respecting bygone ages and utter ignorance of passing events. He is apt to entertain an exalted opinion of classical learning, and a total disregard of modern sciences and practical good sense.

"Education consisting chiefly of language," observes G. Combe, "leaves the mind of the pupil ignorant of things, ignorant of men, and ignorant of the constitution of the social system in which he is destined to move. He is trained in abstractions and among shadows, and when he enters practical life he finds that his real education is only at its commencement." * No wonder, then, that so many eminent men have raised their voices against the present scholastic course. "A finished scholar," says Gibbon, "may emerge from the head of Westminster or Eton in total ignorance of the business and conversation of English gentlemen." † The learned author of "National Government" remarks, "Our schools and colleges do not teach, and do not think of teaching, those parts of knowledge which become citizens of a free state particularly to learn." ‡ "There exists," says Talleyrand, "a complete discordance, and, in some cases, an absolute opposition between what a child is compelled to learn, and what a man is bound to do." § "The art of speech," says also Aimé-Martin, "is unknown in a government in which speech is power ; the laws are unknown in a society in which the political institutions impose duties. In

* *Lectures on Popular Education.* † *Memoirs of my Life and Writings.*
‡ *On National Education.* § *Rapport sur l' Instruction publique.* 1791.

a word, public instruction continues to be silent on all that children will, when men, require to know."* Dr. Arnold himself, who was so conversant with the details of instruction in classical schools, equally condemns it as inefficient: "Our intellectual eminence in modern times," he says, "by no means keeps pace with our advances in all the comforts and effectiveness of society. And I have no doubt that our miserable system of education has a great deal to do with it."† (7)

Even the little which is usually learned of Latin and Greek is often but imperfectly acquired, and seldom leads to useful result. Young people parse with grammatical accuracy every word of Cicero; but they can perceive neither the force of his reasoning, nor the majesty of his periods. They scan each line of Virgil with critical exactness; but they can feel neither the exquisiteness of his thoughts, nor the harmony of his verse. They write Latin themes and make Latin hexameters; but they can neither read the ancient classics with pleasure, as we do our national writers, nor express themselves in Latin with even an approach to ease or elegance.

The ordinary method by which the ancient languages are acquired, presents so few incentives to exertion and so many obstacles to learning, that, for one who distinguishes himself, twenty sink disheartened into torpor and perverse unwillingness, insensible alike to rebuke and ferula. They are thought by their instructors to be unredeemable dunces; but, when the fetters of the scholastic course are shaken off, those who have been able to resist its baneful influence and give themselves a more useful education, often far surpass in the practical affairs of life their school-fellows who carried away the prizes in ancient learning. In fact, so indispensable to success is this second education in the present order of things, that those who have not acquired it, whatever may have been their success at school, never rise to eminence.

Even to professional men Latin and Greek never afford advantages equivalent to the time, labour, and expense which their acquisition by the ordinary scholastic process demands. Less beneficial still are these languages in other pursuits. This classic lore is often unsuitable to the business for which children are destined by their parents. It is true that learning, which was formerly the privilege of a chosen few, is now the birthright

* *De l'Education nationale en France*, *Journal des Débats*, 16 *Janvier*, 1829.

† *Life and Correspondence*, by A. P. Stanley.

of all; but of the immense range of subjects which modern civilisation presents for investigation to all inquisitive and aspiring minds, every one ought to select that which can best realise his expectations in life, and enable him to serve society. For the great majority of citizens, universal knowledge, were it possible, would be a useless luxury. Besides, instruction would lose in depth what it gained in extent; and, in attempting to be fit for everything, a person would run the risk of being fit for nothing. Society, embracing, as it does, an infinite variety of occupations and callings, will be truly benefited only from the subdivision of study, and consequent concentration of knowledge among its different members. The subdivision of labour is a principle of perfection and universal usefulness.

That is a very mistaken pride, which sends children to classical schools, to foster in their hearts desires inconsistent with their future prospects, and to confine them to that kind of learning which is appropriate to clergymen, to qualify them for a place behind a counter. The mean defeats the end; for this is acting in direct opposition to human nature. Man is always prompt to ascend, never willing to descend. Let him who adopts this course for his children assume the responsibility of their ill success in pursuits for which he has taken every pains to unfit them. Let him blame himself, if they scorn his advice or rebel against his authority, when desired to embrace a calling which they think beneath them. "In the social order in which all places are marked," says J. J. Rousseau, "every one ought to be brought up for his own." *

If schools were, as we think they ought to be, an introduction to the world; if their method of training embraced the cultivation of all the mental powers; if their course of study were a preparation for the various avocations and active duties of life; and if the instruction received in them were available in manhood, they would present some prospect of advantage to every class of society. But this is not the case: it is but too obvious that, in this country, scholastic instruction is not instituted with a view either to the greatest advantage of the child or to the greatest public utility. It is, therefore, an error in parents to make heavy sacrifices to procure for their children admittance into classical academies, under the belief that education is better than fortune—an aphorism, the truth of which, under the influence of a better system, would be undeniable.

* *Emile, ou de l'Education.*

Time and civilisation have created a new order of things, which renders the old scholastic course inadequate to the wants of the great majority of learners, and altogether inconsistent with the present state of society. The instruction of youth should, like the laws, change with the character and institutions of a nation; it should follow its moral and intellectual progress; and should be extended with the increasing demands of the people. The exclusive devotedness of our ancestors to classical studies was, in the absence of a national literature, their only means of escaping from barbarism and ignorance. But, of late, many arts and sciences have come into existence, presenting new channels of investigation and inexhaustible sources of mental activity: the future prospects of humanity are chiefly involved in their cultivation and progress; to them a large portion of our youth must therefore be made to direct their attention.

Industrial pursuits are the foundation of our social and political organisation, the source of the prosperity of the state, and the means of existence of the great majority of citizens: the arts and sciences, on which they depend, ought to form part of national education. Let, then, the practical sciences be imported in our schools and universities as they have been in active life. An early initiation into them, and a persevering attention to them during the whole period of scholastic training would, conjointly with literary studies, prepare young people for their respective walks in life, and secure their usefulness as members of society. The union of science and literature should be the characteristic feature of modern intellectual education.

The little progress which the ancients made in the physical sciences, and, particularly in chemistry, did not permit them to perceive the intimate union which exists between the sciences and the arts. In their ignorance of political economy, they despised agriculture and manufactures, unaware of their influence on civilisation. Among them the mechanical and industrial arts were abandoned to slaves. Xenophon affirms that such occupations corrupt man;* Aristotle denies to those who are engaged in them the right of franchise;† Plato, who, in his Republic, gives the first place to musicians, proposes to punish the citizens who should carry on commerce.‡ In the middle ages the useful arts were the occupation of bondsmen exclusively; they were neglected by the enlightened portion

* *Memorable Sayings.* B. V. † *Politics.* B. III., c. vii. B. VII., c. x.
‡ Book II.

of the community, and could therefore receive but little improvement. But, now that they are carried on by freemen, and are ennobled by the sciences to which they owe their birth and perfection, they ought to form part of a general system of education.

In the fifteenth and sixteenth centuries, when Europe had just emerged from barbarism, and the arts and sciences were at their lowest ebb, the modern languages containing nothing worth reading, the people could find the information they required only in the languages of Greece and Rome. These were, indeed, efficient instruments of civilisation: they furnished the elements of liberal education, and imparted intellectual life to the modern world. All efforts were consequently directed towards them; and as Europe, with perhaps the exception of Italy, had then but very imperfect dialects, those languages served to record the notions and opinions of the time, and became the vehicles of communication between the learned. Latin, especially, was to them really a living language; but it has, as well as Greek, lost its importance in proportion as modern languages have been perfected and stored with knowledge in every department. The ancient tongues are now so limited in their use that they ought no longer to be the engrossing objects of a truly national education. They have accomplished their destiny as vehicles of ideas; they have enlightened and humanised modern nations as much as it was in their power; their mine is exhausted; they can now do little for the advancement of arts and sciences, or for the well-being of humanity. They should be studied, not for their own sake; not as an end, but as a means; and, under a rational system, they may be most useful auxiliaries to mental discipline and improvement in the native tongue, without interfering with the other departments of education.

SECT. IV.—THE CHIEF DEFECTS OF THE ORDINARY CLASSICAL COURSE.—NECESSITY OF A REFORM.

The objects of instruction being considerably multiplied, the time usually devoted to the present narrow circle of classical learning must be proportionally shortened, to make room for the study of branches of knowledge indispensable in our advanced state of civilisation. By adopting a rational method, and confining the student's attention to what is useful in the dead

languages, they could be learned better than they now are, and in one third of the time. "We do amiss," says Milton, "to spend seven or eight years in scraping together so much miserable Latin and Greek as may be learned otherwise easily and delightfully in one year."* He who spends six years in teaching what can be learned in three, robs his pupil of so much precious time.

The unreasonable duration of the ordinary classical course, renders unavailable for the acquisition of useful practical knowledge, the years most favourable to it. This evil, which imperatively calls for a reform, is attributable to several causes.

I. *Parents* do not usually train their children to those habits of industry and self-improvement, to that love of knowledge and that respect for teachers, which are the best security for the earnest and active prosecution of their studies.

II. *The teacher's* position in society is not such as to secure for the profession men of superior merit, and to induce him to use his best energies for the rapid advancement of those committed to his care.

III. *Learners* enter upon their classical studies at too tender an age, and before they have gained sufficient command of the native tongue.

IV. 1. *The method* pursued does not conform to nature, nor to the laws of man's constitution: it does not sufficiently bring into action curiosity, imitation, spontaneousness, and self-teaching,—the innate dispositions most favourable to study.

2. It does not bring all the intellectual faculties to bear on the study, and overtaxes the memory to the prejudice of the reasoning powers: in fact it aims at verbal acquisitions rather than at mental culture.

3. It does not afford to beginners all the assistance which they require for entering at once on the reading of the classic writers; and relies too much on the dictionary, the use of which is irksome, tedious, mechanical, and unsatisfactory.

4. It reverses the natural order of things, by giving to synthesis the precedence of analysis, deducing language from grammar, and ideas from words, instead of grammar from language and words from ideas.

5. It sacrifices the end to the means, by making the learner dwell too long on the Latin grammar, and read the Latin authors too sparingly.

6. It consumes a considerable portion of the learner's time in

* *On Education*, to Sam. Hartlib.

many unprofitable occupations, especially in the writing of Latin prose and verse, an inefficient and unintellectual exercise, as will subsequently be seen, and an acquisition completely useless at the present day.

But the tediousness of the course is particularly attributable to the immature age at which it is usually commenced. Young children can, indeed, make but slow progress in studies, which to them must be very difficult and uninteresting. "We begin too soon, and we begin the wrong way," says Mr. Wyse.* "The radical error of our system," observes also Dr. Chalmers, "lies in the too early admittance of our youth to our universities."

We will, subsequently, and at their proper places, examine into these defects with a view to remedy them; but, for the present, we must be content with observing that they are the principal causes which concur in lengthening beyond reasonable bounds the period of classical studies, and in defrauding young people, by exclusive attention to them, of information which would be more useful in after-life.

Tedious, irrational, and incomplete, however, as is the course of classical education generally pursued in these countries, no blame can be attached to those who have adopted it; for it is forced upon them by the universities, which make education and learning consist in parroting grammars and vocabularies, in parsing, scanning, and translating a few ancient authors; in writing exercises, themes, and Latin verses. The teacher's services are estimated, not by the quickened perception, the established habit of attention, the well-regulated mind, or the refined taste of his pupil, but by the actual amount of Latin and Greek which has been waded through in the academical course. Where universities lead, those who prepare scholars for them are bound to follow. Each individual teacher is obliged, in self-defence, to conform to the orthodox course recognised in colleges and universities, until the public shall be more fully impressed with a sense of its many defects.

Among those who have left on record a disapproval of the system pursued in the English universities, we may mention Lord Bacon, Locke, Milton, Cowley, Addison, Dryden, Gibbon, Adam Smith, Ensor, Gray, Cowper, and Byron. (8)

Blind respect for the monachal institutions of universities has perpetuated until now the vices of a system of instruction, which contrasts so obviously with the progress that science, art, and

* *Education Reform.*

philosophy are making on all sides. Ancient literature continues to be studied rather because antiquity has sanctioned the practice, than because its value is clearly seen. Many parents, under the influence of early acquired prejudice, insist on their children learning what they themselves have learned; others, under the erroneous impression that classical learning is the privilege of gentlemen, wish, at any risk, to secure it for them. And, yet, strange inconsistency in a people who boast of a high state of liberty and civilisation, that instruction, limited as it is, cannot in its higher departments be obtained by all students, however gifted or industrious some of them may be; for the English universities are so constituted as to be accessible only to the wealthy, and to exclude from their privileges those who dissent from the established church.

The present tendency of society is to special and professional education; and such education cannot be obtained at the old universities. Our ancestors could not avoid confining their youth to the narrow circle of what were, in their time, aptly called, "the learned languages;" because, as already remarked, they had little else to teach them, and that little was to be found in those languages. But, in the nineteenth century, can we be satisfied with the scholastic instruction of the middle ages? All eminent educationists acknowledge the inefficiency and insufficiency of the collegiate studies; all proclaim the necessity of a reform. How can those who have it in their power to work a change, and neglect to do it, reconcile their apathy with a sense of the duty they owe to their children and to their country?

SECT. V.—NATURE AND LIMITS OF THE REFORM PROPOSED.

Far be it from us to recommend the suppression of classical studies: we object only to their exclusiveness and insufficiency, to the length of time consumed by them, to the early age at which they are commenced, and to the method usually pursued. They hold a high rank within their sphere of utility, especially as means of mental culture. In fact, the comparative process of learning them is, perhaps, the best calculated for that general and thorough cultivation of the faculties, which produces an active and well-regulated mind. Besides, it would be folly to think of neglecting the noble languages that daily supply materials with which ours are enriched. The beautiful specimens

of literary composition which they exhibit, though few in number, will always stand models of excellence. The study of them ought not to be abandoned; it should only be kept within just bounds; it should be so regulated that young people may have time to attend to the arts and sciences which modern civilisation renders necessary to fit them for the different avocations to which they are destined. Every succeeding generation has more to learn than the preceding; it needs, consequently, to acquire knowledge with greater facility and dispatch.

As professional acquirements are to be gained not only through the native tongue, but often also through foreign living languages, those which among the latter contain the required information assume, in this respect, considerable importance. As stores of information and vehicles of intellectual communication, they excel the ancient languages; but these, in their turn, are superior to the others, as auxiliaries to mental discipline, grammatical investigation, and literary acquirements.

If, then, it is erroneous to give the name of *learning* to the knowledge of Latin and Greek exclusively, it is not less so to call modern languages mere *accomplishments*. This undue admiration on one side, and undue depreciation on the other—the effects of ignorance—are unworthy of an enlightened nation. Let the mode of learning the ancient languages be more interesting, comprehensive, and philosophical, and the admirable productions of antiquity will become means of mental training and models of taste. Let also the teaching of the modern languages be based on more rational and practical principles, and not only will they be to the proficients sources of instruction and mediums of communication, but they, as well as the ancient languages, will assist in the great work of intellectual cultivation. The reform which we propose, in accordance with these views, consists not only in taking from the time at present allotted to classical studies a reasonable portion to be devoted to other departments of useful knowledge; but also in placing the ancient and the modern languages on an equality in the education of youth: we demand for both the same attention and time from the learners, the same capacity and information from the teachers, and the same rank in public esteem.

Our observations on the efficiency of language, considered as an instrument of the mind, and on the extent of the benefits conferred by the study of the dead and the living languages, have, we hope, sufficiently proved their usefulness as branches of

education; whilst our remarks on their relative importance enable parents to decide whether it may be more advantageous for their children to learn a dead or a living language; but learn at least one or the other they ought. Both are indispensable to a complete intellectual education. The mother tongue cannot, in mental training, supply the place of a foreign idiom, because it is so intimately associated with our feelings, so identified with our habits of thought, so much a part of ourselves, that it easily escapes analysis and critical investigation. It is by its comparison with other idioms that the powers of the mind are evolved, and sound notions of grammatical science are formed. At the same time, it must be remembered that, great as is the mental action which the study of a foreign language calls forth, it is limited in its effects; for each department of knowledge is addressed to some particular class of faculties. Intellectual superiority results from the harmonious development of all the mental power. Sciences and arts should, therefore, concur with literature and languages in producing a perfectly cultivated mind.

Society, as now constituted, is equally literary, scientific, and industrial. The middle and upper classes, more or less, partake of this three-fold character of modern times. A good system of education intended for them should, therefore, combine the branches of instruction which refer to these three conditions of society, and the more so, as they are calculated mutually to aid and illustrate each other. We have no doubt that, by adopting a rational method, and rejecting from literary studies whatever is useless, foreign languages, ancient or modern, may be learned not only concurrently with and subserviently to scientific and industrial pursuits, but in such a manner also as to insure both their complete possession and the incidental benefits which arise from their study.

BOOK III.

THE THREE GREAT AGENTS OF EDUCATION.

"Mothers and school-masters plant the seeds of nearly all the good and evil that exist in our world; the reformation of education must therefore be commenced in nurseries and schools."—DR. RUSH.*

"One of the surest signs of the regeneration of society will be the elevation of the art of teaching to the highest rank in the community."—CHANNING.†

"La méthode décide du succès de l'enseignement; car elle est le guide de l'étude."—J. M. DEGÉRANDO.‡

CHAPTER I.

PARENTS.

SECT. I.—DUTIES OF PARENTS IN RESPECT TO EDUCATION.

IN the acquisition of knowledge, and of foreign languages in particular, a young learner requires aid and direction. His improvement depends not so much on his intellectual capacity as on his parents, his teacher, and the method which he pursues: the parent gives the first impulse to the moral and mental energies of the child; the teacher guides through the course, and the method is, as it were, the manual of instruction. These three great agents of education act equally important parts. Educational reform must be commenced by them.

Parents lay the first stone in the edifice of education; no office, therefore, is more important than theirs. The legislator may enact laws to punish crimes; he may enforce duty by the dread of punishment; but the parent prevents the commission of crimes by an early cultivation of conscience, the direction of the will,

* *American Annals of Education.* † *Ibid.*
‡ *Cours Normal des Instituteurs.*

and the formation of moral habits: he teaches the practice of virtue for its own sake. The clergyman may, at the last hour, offer us the consolations of religion; but the parent enforces religious duties by early habits, and effectively prepares us for eternity, by laying the seeds of a virtuous life.

The skill of the teacher and the excellence of the method will be of little avail, if the pupil fail in the proper dispositions to study. These deficiencies, unfortunately too prevalent among young people, are often the fatal consequences of the carelessness of parents who, from ignorance or thoughtlessness, shamefully neglect the education of their children. When bad habits have been early acquired, it is doubtful whether an instructor can ever eradicate them. Besides, it is doing him an injustice to multiply the difficulties of his task. How can he effectually teach his pupils, while his attention is engaged in endeavouring to do away with the evil effects of parental negligence?

There would be little need of coercion at school if the child, by a judicious, moral, and religious education at home, were inspired with that eager taste for useful knowledge which cheerfully encounters difficulties; that filial affection which seeks to gratify the anxious wishes of parents; that respect for masters which prompts to obedience; that love of truth which abhors the idea of imposing on those who confide in him.

Most parents abandon to chance the early training of their children. Many, even, are under the impression that nothing can be done towards the education of an infant. This is a most pernicious error. If parents do not properly direct his first inclinations, he will imbibe those which chance throws in his way; he will be educated by circumstances; for there is no avoiding education: it unceasingly goes on from the moment of birth to the last stage of life. But that which is received in childhood is the most important in its consequences. Habits of order, truth, and industry in the child will make the prudent, honourable, and useful man.

Before the child has articulated a word, he has laid up thoughts, and formed habits of feeling which may exert a controlling influence on his scholastic pursuits—nay, on his whole life. Every expression of countenance caught by his eye, every tone of voice which strikes his ear, every action performed in his presence, every emotion, every passion exhibited by those who approach him, educates him, affects his character and future destiny.

It is never too late to begin any study, to acquire any particular information: at any age at which mental culture commences it will be productive of beneficial results; but the seeds of morality, piety, and conscientiousness, cannot be sown too early. Dispositions to what is good and useful ought to begin in infancy, ought to be second nature to the child. Moral education is, in most cases, hopeless, if it is put off until after the period of childhood.

Parents owe to their offspring what is more valuable than life, that which makes life a blessing, and, in fact, gives life to life itself—a religious and moral education. The harmony of the moral development, which it is in their power to effect, will prepare for the mental training of their children by an irresistible, although mysterious, influence. Teachers will make them learned the more easily, if parents make them virtuous; the precepts taught at school will be the better understood, and the more effectually, if in the family circle nothing be witnessed or practised but what is right; whereas all the principles of morality imparted by books or teachers will be unprofitable, if evil habits are fostered at home.

This first step in the educational course is, as we have seen, conformable to the manifest design of the Creator. The double process—*Example* and *Practice*—by which it can be accomplished, is equally in conformity with the dictates of nature. In order that virtues and moral feelings be inculcated in children, they must be practised before their eyes; and, in the absence of the circumstances which give rise to them, they must be presented to their imagination by natural and simple narratives, taken, as much as possible, from the realities of life. But it is not enough to set them the example, and present them with illustrations of piety, justice, goodness, and wisdom, the parents must also train their offspring to the practice of these moral acquirements. Exercise, confirmed into habit, is the true way of establishing the virtuous character.

When we wish to train the muscles to the performance of any particular art, or the intellectual powers to the knowledge of any particular science, we are not satisfied with merely giving precepts and directions; our chief attention is employed in making the muscles and the faculties go through the necessary exercises, until, by frequent repetition and correction, they acquire the requisite rapidity and precision. On the same principle, if the aim of the parent be to develop a moral

sentiment, he must make his child go through the exercises which render it habitual, and not be content with teaching precepts which are addressed to the understanding alone, and which, therefore, might be learned with the greatest accuracy, without necessarily imparting even a shadow of increased vigour to the moral faculty.

It were to be wished that parents knew the nature and importance of the care which their children claim before being placed in the hands of instructors. They should watch the gradual development of their faculties, afford these faculties scope for action, and direct them to a useful and virtuous end. They are bound to keep up their natural inquisitiveness, to open their minds to the elements of knowledge, to cherish in their hearts regard and gratitude towards their instructors, and to imbue them with those moral and religious feelings without which mental powers and extensive knowledge are rather a calamity to themselves and to society. Unless love of knowledge, habits of obedience, industry, self-improvement, and the other moral qualities requisite for learning, have been early formed, and unless they are kept alive and increased by parental co-operation, teachers will labour in vain when they attempt to impart instruction to their pupils.

Many parents, absorbed in the business of life, or given up to its pleasures, cannot find leisure to discharge this most important of their duties. Unable to attend to children, or anxious to get rid of their noisy sport, they hurry them to school, to which they carry all the vices of early miseducation. There is a general feeling amongst parents, that the worse and the more troublesome their sons are, the more is a public school a fit place for them. The great end of such establishments is, in their opinion, to flog out the vicious habits which they have allowed their children to form; and thus must the instructor, in spite of himself, exchange his noble office for that of an executioner. How many unfortunate little creatures have thus cruelly suffered for the faults and ignorance of their imprudent parents!

Here we cannot refrain from remarking that much thoughtlessness and inconsistency is exhibited by many English and Irish parents on this point: they are humane to their horses, and devoid of compassion for their offspring. The same man, who, on lending a favourite nag to a friend, entreats him to use the whip and spur very sparingly, will, on delivering up his child to a school-master, not unfrequently recommend him not to spare

the rod. The laws forbid ill-treatment to animals, and sanction the brutalising of delicate youth both in schools and factories. The people have, in general, that self-respect which becomes freemen; and yet they bring up in the debasing habit of being horse-whipped those on whom devolves the right of maintaining the family dignity; they make cowards of them by constant appeals to bodily fear. To complete the inconsistency, the scions of British aristocracy are sent to high schools, where, under the odious and degrading system of fagging, they alternately practise meanness and tyranny. *

SECT. II.—IGNORANCE OF PARENTS ON THE SUBJECT OF EDUCATION.

Indispensable as is the preparatory discipline which alone can secure the success of school-training, few parents are capable of conducting it; few women are aware of the duties of a mother, when they enter into the matrimonial state. Their affection cannot supply the place of consistency or judgment; nor can their maternal instinct preclude the necessity of information and method. Unconscious, as they generally are, that in childhood the principle of authority supplies the place of reason, and that in their incessant intercourse with their infants they are educating them, they do not always make the necessary efforts to present but good examples to them, to direct their rising faculties properly, and to give them right notions of things or of language. They are most shamefully ignorant even as regards the first physical wants of children.

One of the greatest anomalies in this enlightened age is the marked deficiency among young females, in the knowledge of the human constitution. Nature declares, in language not to be misunderstood, that the great majority of women calculate upon finding their chief happiness in matrimonial life, and that they look upon the domestic circle as their peculiar sphere of usefulness and enjoyment; but every day's experience too plainly shows how little prepared they are to enter on these primary and interesting duties, which God has assigned to them. Neither at home nor at school is a single fact or principle taught, which has

* "To the fagging system, we think, is mainly attributable the want of independence, both politically and in private life, which has characterised too many of our countrymen—a servility without an object, an unmeaning, unaccountable subserviency to the will and caprice of others."—*Journal of Education*, No. xvii., p. 88.

direct reference to the judicious fulfilment of offices which are to become the subject of their anxious thoughts and feelings. In elegant accomplishments and the elements of science a female receives more or less instruction:—but where is the knowledge which, when she becomes a mother, when her heart is overflowing with tenderness towards her offspring, will direct her to the treatment which its delicate frame requires. "To make herself worthy of the education of her child, she is obliged to recommence her own." *

The mothers who reflect at all must experience deep and bitter mortification at their ignorance of the treatment required by an infant, especially when that ignorance may endanger the future happiness, and often the life of the little being thus committed to their charge. How many diseases and weak constitutions are daily engendered by the foolish indulgence of parents, who know nothing of the hygienic laws relative to air, food, clothing, exercise, sleep, and the other departments of physical education! "Surprise is sometimes expressed," says A. Combe, "at the number of children who are carried off before completing their first or second year; but, when we consider the defective education and entire ignorance of the human economy, not only of the nurses and servants, but of the parents themselves, our wonder ought to become greater that so many survive than that so many die." †

The ignorance of parents is still more to be deplored in regard to moral and intellectual discipline, than to physical education, because it is attended with more disastrous consequences to society, and affects not only the present, but the eternal condition of their children: few are those who have not been, more or less, the victims of mis-education. In the opinion of the great majority of people, parental duties consist solely in making a provision for the physical wants of their offspring; and, while pursuing this object, they lose sight of every other consideration, and neglect the culture of their reason and moral sense; they, in fact, take all possible pains in heaping up for them wealth, which will become in their hands only an instrument of evil, because they have not been taught the means of using it properly.

Such is the appalling state of things in this respect, that, among all classes of the community, the years of infancy are now mostly spent without the benefit of salutary direction, and but too frequently under the baneful influence of parental incon-

* Aimé Martin, *De l'Education des Mères de famille.*
† *The Physiology of Digestion.*

sistency and bad example. Repeatedly telling the young that knowledge and virtue are valuable, is not sufficient to impress them with a practical conviction of this truth. If the parents do not always act up to their words (and very few do), they only teach them duplicity and falsehood. But, not satisfied with setting the most pernicious examples, many lead them to dishonesty and vice by early indulging them in all sorts of demoralising practices, in gormandising, dress, dissipation, field sports, and frivolous accomplishments; they cherish in them a passion for worldly vanities, which are in direct opposition to the seriousness of scholastic pursuits, and which foster habits of idleness and extravagance that soon end in wretchedness and ruin. Thus, misguided, parental affection sacrifices the future morality, intellectuality, and happiness of the man, to the momentary gratification of the child.

But if the excess of solicitude and the blind indulgence of some parents are prejudicial to the children, the cold indifference and chilling severity assumed by others, are not less so; for they alienate for ever the heart of the child from the authors of his being. Some parents never correct a child but in anger, and they usually resort to scornful, sneering, or offensive terms in rebuking him, even for the most trifling faults of childhood; others seldom condescend to join him in play, or sympathise with his joys; they wish him to be as grave and steady as themselves, and they deny him the most innocent sports; others, again, always suspicious of evil, give him no credit for good intentions, and attribute to malicious design every little mischief he commits through giddiness, or from an instinctive spirit of inquisitiveness. Such severity and injustice are most calamitous: they render the child hypocritical and deceitful; they check his natural desire for self-improvement; they cause him to lose all affection for his parents, as also to seek in the society of strangers—nay, of servants—sympathising feelings, and a compensation for the misery which he endures in parental intercourse: thus are broken the ties of filial love, of the absence of which we see so many deplorable instances.

Few are the parents who know how to pursue a just medium: they run from one extreme to the other; and their educational training, characterised, as it is, by carelessness, inconsistency, folly, and ignorance, is productive of incalculable evils. Sometimes very young children are taught revenge and injustice, by being made to beat the objects against which they heedlessly

hurt themselves; at other times they are rendered cowardly and superstitious, by being frightened with imaginary objects of terror, as the readiest means of quieting them. When the period of study has arrived, some are allowed to waste a considerable portion of their time in bed or in trifling occupations, whilst others are kept at hard mental labour longer than the law would permit them to work in manufactories, thus acquiring habits of indolence in the one case, and a hatred of books in the other. But one of the worst consequences of this general ignorance in educational matters is the difference of opinion which not unfrequently exists between the father and the mother about family discipline, and which is sometimes most imprudently allowed to break out into disputes in the very presence of their children.

Often also do we see disunion and enmity engendered among the members of one family, either by unjust and unnatural preferences, or by invidious comparisons between them. If young persons so frequently disregard the advice and injunctions of their parents, it is, in many instances, because they have early witnessed their injustice and inconsistency; and, in others, because their early caprices have been too much consulted, and their disobedience has been suffered to pass unpunished: they lose respect for, and confidence in those who promise rewards and punishments without any serious intention of performance, and whose words and actions are in constant discord.

It is lamentable to reflect how many thousands, who ought to be deeply interested in the temporal and eternal welfare of their children, never trouble themselves about the nature, purpose, or methods of education. Many, it is true, in this as in religion, assent to doctrines and principles, but few are in earnest about them. Not one person in five hundred, even among the middle and upper classes, really knows in what education consists. The parents themselves, being in general ill-educated, cannot properly direct the infant mind; yet they, for the most part, imagine that they understand the management of children, so that, under this conceit, very few ever think of inquiring what are the best means of bringing them up, and of preparing them for the school-master.

SECT. III.—MEANS OF ENLIGHTENING PARENTS.

The universal ignorance which, with a few honourable exceptions, prevails about the importance, objects, and process of education, is most deplorable and most hostile to the best interests of society. It demands a prompt and energetic remedy. The public mind ought to be enlightened on these points. It is particularly the office of a paternal and wise government to take education in hand, and enforce it upon all classes of the community as the only safeguard of their morals and liberties. A sovereign is entitled to call himself the father of his people, only inasmuch as he causes his ministers to diffuse widely among them the benefits of education. Governments should adopt every means to inspire the people with a love of order and self-improvement, to impart to them a knowledge of their social rights and duties, to rouse them to a consciousness of parental responsibility and obligations, to offer them useful suggestions on domestic training, to propagate the best methods of instruction, to excite and gratify their desires for information, to elevate the qualifications, and, hence, the character of their teachers: in short, they should instil into the minds of all a deep conviction of the extreme importance of education, and afford to all classes, from the lowest to the highest, facilities for availing themselves of its benefits, according to their respective spheres in life. The state ought not to rely on individuals for the execution of its own duties in matters of education, any more than in other matters of public interest.

However, a general feeling favourable to education must be created before either the government or the legislature can interfere with any chance of prompt efficiency; for legislative interference is often abortive when unsupported by public opinion. To effect this object, associations must be organised throughout the country; the conductors of the press and all enlightened philanthropists must join in a crusade against ignorance: thus will humanity complete the great work of regeneration commenced by its crusade against slavery. As all great measures of public interest have been accomplished by the combined efforts of thousands, so must education reform be accomplished. The discipline of prisons has had its Howard; Catholic emancipation, its O'Connell; free trade, its Cobden; temperance, its Mathew;—education, also, needs its champion and

its apostle : like religion, it must send forth its missionaries in all directions to distribute publications by thousands, and to lecture every parent in the empire. Let the men of influence give their patronage, and the men of education their talents, to this great cause ; let the ministers of the gospel make it a constant theme of instruction and exhortation ; let all those who feel the benefits of education set to work in their respective localities by addressing parents either through the press or in public assemblies.

Extemporaneous lectures will, however, more effectually than printed pages combat the ignorance and rouse the apathy of parents in respect to education. The high office of educational missionary would, therefore, demand some powers of oratory. Many generous minds so gifted could be found willing to come forward in support of so noble a cause. Other persons could be appointed, and paid either by private associations or by the state ; and, if economy were an object, the office of delivering public lectures on education might devolve on those who should be intrusted with the inspection of schools and the examination of candidates for the scholastic profession. If the educational missionaries are eminent in virtue and knowledge—if, above all, their hearts beat high with the desire of improving their fellow-men and elevating their own country, they will easily awaken and keep alive a public spirit of inquiry on the subject of education; they will enlighten the people on its importance both to the individual and to society ; they will unfold all the objects of which it consists ; they will impress on parents a consciousness of their duties, and of the qualities necessary for fulfilling them, dwelling especially on affection, gentleness, patience, consistency, justice, and firmness, as the most indispensable ; they will, finally, unfold to them the manner of effectually accomplishing their arduous and responsible tasks in everything which concerns the physical, moral, and intellectual training of their children.

It is especially in youth that the future parent should imbibe the notions which he shall afterwards so much need. Education will reach its proper standard only when it is placed on a footing with the highest branches of knowledge. In schools for either sex,—in colleges and universities, the science of education in its three departments should be regularly taught in connection with physiology, ethics, and mental philosophy, as is the practice in some German universities. It should be made an indispensable part of a complete course of instruction.

If, by the active solicitude of a liberal and enlightened government, it were universally studied and well understood, parents would carefully prepare their children for the teacher, and aid him to promote their advancement. Thus the rising generation, under the influence of parental morality, early discipline, better systems of instruction, and the mutual regard, as well as combined efforts of parents and teachers, would, one day, by its progress in the various departments of education, raise the moral and intellectual character of the nation.

SECT. IV.—THE MOTHER, THE NATURAL PRECEPTOR OF HER CHILD. PREPARATION FOR THE OFFICE.

God has placed the child under the influence and guardianship of parental love, that he may through sympathy reciprocate that love, and early practise all duties, virtues, and affections thence arising. Nothing can be substituted for such a school; the pleasures which he enjoys there, the pains which he feels, the attentions which he receives or bestows, can never have their place supplied for the training of his mind and his heart. It is especially the mother who is his first preceptor. With sympathy as an interpreter, she enters into communion with her child; she becomes the most zealous of teachers, and he the most apt of pupils; she gives him his first ideas and inspires his first feelings; she actually begins to train her child from the moment he sees the light. The kindness or harshness of her looks, the gentleness or roughness of her tones, act upon his feelings, and hourly excite emotions of love or anger,—of joy or sadness, which, perpetually returning, form the habitual character of the future man. The mother's smile gives the child his first glimpse of heaven, as the tenderness of her affection awakens his first conception of an all-bountiful Providence.

Women dwell with interest and patience upon the trifles that make up the lives of children; and it is on the direction of these seeming trifles that their future greatness will depend. "A kiss from my mother," said Benj. West, "made me a painter." When yet a child, he had drawn a rude sketch of an infant relation sleeping in a cradle: his mother chanced to see this childish production, and was so well pleased with it that she took the young artist in her arms and rapturously kissed him. That mark of maternal delight fixed his fate for life.

"The future destiny of a child," said Napoleon, "is always the work of his mother." He often declared that he was indebted to his own mother for his elevation. Remarking one day to Madame Campan, that the old systems of education were defective, he asked her what girls required in order to be well educated. "Mothers," was the answer. This word struck Napoleon. "Well," said he, with his usual rapidity of thought, "this is a whole system of education. You must, madam, make mothers who know how to bring up their children." And he placed her at the head of the Ecouen Institution, which has since been so celebrated.

To form mothers worthy of that name ought, indeed, to be the chief end proposed in female education. Every girl is called by nature to become a wife, and bring up a family; she should then be put in possession of the means to forward the best interest of a husband, and to prepare children for the studies of school and for the duties of social life. When a man of sense marries, it is a companion he wants, not an artist. "It is not merely a creature who can paint, and play, and dress, and dance," says Hannah More; "it is a being who can comfort and counsel him; one who can reason, and reflect, and feel, and judge, and act, and discourse, and discriminate; one who can assist him in his affairs, lighten his cares, soothe his sorrows, purify his joys, strengthen his principles, and educate his children."*

The mother has almost the exclusive direction of the young during the first twelve years—the most critical period of life; that in which habits are being formed and the most lasting impressions received. If her understanding be cultivated and her memory enriched with varied information, she will be able to draw from the resources of her mind endless means of exciting and gratifying the curiosity of her young pupils, of unfolding and improving their judgment. At the same time, it must be borne in mind that the most talented women are not always the most agreeable in their domestic capacity. Moral, more than intellectual, excellence would secure to a mother the power of conferring happiness on those who surround her, and of exercising a proper influence over the youthful mind. "If, above all, the mother makes it a duty to stamp the divine impress deeply in the mind of her son, never can it be effaced by the hand of vice."†

It is time to shake off the prejudice which condemns woman to a life of frivolity: she must be educated seriously; the progress

* *Strictures of Female Education.* † Jos. Demaistre, *Soirées de St. Petersbourg.*

of civilisation, by lowering the pretensions of physical force, has done away with the notion of her inferiority. She is the equal partner of man, and often takes an active part in the most important affairs of life: the well-being of society demands that her acquisitions be raised to a level with the intellectual and moral exigencies of the age,—in a word, that she be useful and estimable, as well as amiable and accomplished. She must acquire that vigour of intellect which will enable her to foresee, weigh, and determine justly those manifold circumstances on which her happiness and that of her family depend. "How can a woman educate children, if she is not accustomed to reflect? how determine what is suited to them? how incline them to virtues which she knows not, and to merit of which she has no idea? She can only flatter and threaten them, render them insolent or timid, affected apes or mischievous and despicable characters."* The benefits of education will never be widely nor effectually diffused, until woman be qualified to lay its proper foundation.

Woman is endowed with the same faculties as man; the law of her culture ought to be the same. Perhaps her knowledge needs not to be as profound as his, but it ought to be as varied. In most cases man has a fixed vocation, which decides for him the departments of knowledge to which he should give his most serious attention; but the circumstances in which woman may be placed cannot be so well foreseen: it is then desirable that she should possess a facility of adapting herself to the various circumstances of this chequered life, as well as be able to initiate her young family into the elements of the different branches of instruction. Her moral and mental powers cannot be too carefully cultivated, nor her information too extensive, as a preparation for exercising with discernment the most important of social duties. The acquirements of a man are often profitable to himself alone; but every virtue, every acquisition of a woman is almost always profitable to her children. Many eminent men, besides Napoleon, might be mentioned, whose celebrity may chiefly be ascribed to the enlightened solicitude of their mothers. If that enchanting and undisputed power which women possess receives from our hands a salutary direction towards whatever is great and beautiful, they will repay us tenfold by leading the rising generation to that moral perfection so vainly sought after by philosophers.†

* J. J. Rousseau, *Emile.*

† The next Book will sufficiently show to mothers the nature and extent of the services which they, if well-informed, can render to their children.

SECT. V.—OF DOMESTIC EDUCATION.

Sympathy commences education in infancy; imitation continues it in childhood. The education of sympathy is almost the exclusive privilege of the mother in the first period: the father usually begins only in the second to exercise his influence actively, and from that period his authority gradually increases. At all times, however, both parents should, when circumstances permit, take an equal part in the moral and intellectual development of their young family without any distinction of sex. The notion often entertained that boys should be under the special government of their father, and girls under that of their mother, is unnatural and most injurious; for this division of government and parental duties not only disunites the different members of one family, but it takes from the affection, respect, and obedience due to both parents by all the children indiscriminately, and deprives the latter of the benefits arising from their combined influence. The sons depend as much as the daughters on a virtuous and pious mother for the formation of their moral habits, whilst the daughters claim, as well as the sons, from an enlightened father the direction of their intellectual training. It is, however, by their example, rather than by precept, that parents can best educate. Let them be and do what they wish the child to be and to do: let their actions be always consistent with their words; let them, in fact, take into their serious consideration that, by the force of sympathy and imitation, he receives from them, whether they will or not, the direction of his future character.

If men, in general, seek to excel their fellow-creatures in riches or in acquirements, and not in virtue or in piety, it is because, in their childhood, they frequently heard their parents speak of the advantages of fortune, and rarely of those of virtue; they were continually excited to vie with their fellow-students in learning, and never in morality or in piety. Most of the insubordination and bad habits of school-boys, most of the errors, prejudices, and evil propensities in society, nay, most of the crimes which are committed in the world, originate in the parents.

The future existence of a child is at the mercy of his parents; he will be what they make him. If everything in his father's house is done without system, it cannot be expected that he will acquire habits of order and regularity; if more attention is paid

to his dress or to his physical comforts than to his moral and mental worth, it cannot be expected that he will be anything but vain, selfish, and shallow; if he hears his instructors spoken of disrespectfully, he cannot be expected to obey them, or to value what they teach; if his parents spend their lives in trifling occupations and sensual pleasures, if all their actions prove that they place money above learning and virtue, he cannot be expected to seek his enjoyment in serious studies and in virtuous habits. Let parents, then, who cannot altogether reform themselves, and who feel that they have not reached that moral perfection which they desire for their children, watch most carefully their own conduct and language while in their presence. The conversations which are overheard have the most influence, because they are received without distrust or suspicion. The superiority which parents naturally have over a child invests them, in his eyes, with a dignity which, to his innocent mind, implies virtue and perfection. Let them act so as to justify this salutary notion: and if it be well impressed in the opening stage of life, parental authority will be long influential and revered.

Happy the children whose parents show them only good example, and who are not deprived of its advantages by being removed from their society at too tender an age. More happy still are the parents who, by an exemplary life, implant the seeds of all virtues in the hearts of their children, and thus secure the most legitimate claims to their affection and gratitude. The severe discipline of school can never, during the first two periods of youth, supply the place of parental solicitude and of a well-regulated family. The influence founded on affection, which is, at home, the main-spring of government, is the most powerful. Filial piety, strengthened by an uninterrupted virtuous family intercourse, must be to young people the source of the kindest sentiments and of all moral virtues.

When circumstances do not permit parents to preside themselves over the education of their young family, they should, if their means allow it, have their place supplied by persons whose experience, high morality, cultivated minds, and love for children, render them worthy of their entire confidence. So difficult is it, however, to supply properly the place of a parent, that many moralists object to this delegation of duty. Among others, J. J. Rousseau, the eloquent advocate of the rights of humanity, insists on a father's educating his own children. "He owes," he says, "men to his species, social beings to society, and citizens

to the state. Any man who can pay this triple debt, and does it not, is guilty, and more guilty still when he pays it only by half. He who cannot fulfil the duties of a father has no right to be one. No poverty, no occupation in life, no human respect, can permit him to dispense with maintaining, with educating his offspring himself. You may believe me, readers, I foretell that whoever neglects this holy duty will long shed bitter tears over his fault, and will not be consoled."*

The family has been appointed by Providence for the moral discipline of the children, and the school has been instituted by society for their intellectual training. The more important part of education devolves, consequently, on the parents: they, or the resident preceptor, being continually with them, can take advantage of circumstances, as they arise, to make a desirable impression: there are innumerable opportunities of doing so in domestic life, which cannot occur in large seminaries. A teacher in a school, being with his pupils only during their hours of study, has few opportunities of noticing their moral failings, and cannot practise in their presence any of those virtues which are best taught by example. This is rather the business of a parent than that of a professor. The latter may cultivate the children's intellect, and assist them in acquiring knowledge; he may instruct a hundred of them, but he cannot educate even one. Kindly feelings, moral dispositions, and virtuous habits are the fruit of home education. The theory of morals may be taught in schools; but the practice is acquired in the family circle.

"Nothing can equal a good domestic education," says Saint Marc-Girardin. "It is preferable to all lay and ecclesiastical colleges. I will go further; I believe that in the paternal house alone can any education be found. Colleges give instruction, but they cannot give education. The training of the soul, the teaching of duty, the preparation for the difficulties and disappointments of life—all this is beyond the discipline of a college. We instruct, we do not educate in our schools; we cultivate and unfold the mind, but not the heart."†

Favourable, however, as the family is to the moral discipline of the child, it must be acknowledged that, in the present order of things, such a discipline is impracticable in the middle and, more particularly, the lower class of society. Many parents can neither undertake the education of their young children, nor

* *Emile.* † *De l'Instruction intermédiaire dans le Midi de l'Allemagne.*

procure resident educators. Some, engaged as they are in the pleasures, and others in the business of life, the poorer class especially neglect them altogether, or give them, in their own conduct, the worst example; whilst those in affluence often abandon to domestics their physical and moral culture. Hence arise, to a lamentable extent, the bad health, bad temper, and bad propensities, which prevail among the young. An ignorant or passionate nurse, a vulgar or vicious servant, is one of the greatest curses with which the dawn of humanity can be visited.

Until parents, and society in general, are regenerated by education, the most practicable way of obviating the fatal consequence of neglect or bad example at home, would consist in having infant schools extensively diffused throughout the community, some being provided by the state for the labouring classes, and others, by private speculation for those who can pay. These schools should be established on the principle of family government for physical and moral, rather than for intellectual training. If they were distributed and organised so as to be within the reach of all families, and to suit their different circumstances, parents would not,—nay, should not hesitate to send their children to them, as they could then better attend to their own occupations, and would secure for their offspring a better discipline than they could give them at home.

Religious feelings, respect for masters, affability to all, regard for truth, sense of duty, desire for knowledge, taste for order, habits of industry and self-government—all are the results of a good domestic education, or of a well-conducted infant-school. Such virtuous habits, by securing the happiest dispositions to study, prepare the way for instruction. The child, whose morality rests on a proper foundation, will generally be little inclined to inattention: he will cheerfully give himself to industry; and, being more disposed to reflect and observe, he cannot fail to advance rapidly in any intellectual pursuit which is marked out for him.

But, of all the means of directing the will of youth, the most durable and most certain is the early cultivation of love and reverence to the supreme Being, and a sense of his unceasing watchfulness over his creatures. If parents be themselves animated with such sentiments, they will easily, and without having recourse to precepts, impress them on their children. These sentiments are the first wants of the child, and by far

more important to him and to society at large than any mental acquisition. Without religion and morality, knowledge, let it be repeated, is only the power of doing mischief.

SECT. VI.—DUTIES OF PARENTS WITH RESPECT TO INSTRUCTION.

Information, although only secondary in early education, must not be overlooked by parents. It is part of their duty to their offspring to prepare them for the arduous labour of scholastic instruction, and to give them habits of self-teaching, in order that they may not depend on the instructor for what should devolve on themselves. They ought to impart to them an accurate practical knowledge of their own language, with correct notions of the external world and of things in general, which may render more interesting and easy their future study, either of languages or of sciences. *Home* education should be subsidiary to *public* education.

However, parents should not force nature, but preserve the child from premature mental excitement. They will have no reason to regret his backwardness in intellectual education, *if*, on entering the third period, he be blooming in *health* and lively in *spirits*, if his *sympathies* are prompt, his *curiosity* active, his *self-love* duly controlled; if he habitually appeals to his *conscience*, and readily submits his *will* to that of his superiors. With such a preparation the period of mental culture will open with a bright prospect.

"The effect of the pains which are taken in the first nine or ten years of a child's life," says Miss Edgeworth, "may not be apparent immediately to the view, but it will gradually become visible. To careless observers, two boys of nine years old, who have been very differently educated, may appear nearly alike in abilities, in temper, and in the promise of future character. Send them both to a large public school—let them be placed in the same new situation, and exposed to the same trials, the difference will then appear: the difference in a few years will be such as to strike every eye; and people will wonder what can have produced in so short a time such an amazing change.

"Suppose that parents educated their children well for the first nine years of their lives, and then sent them all to public seminaries, what a difference this must immediately make in public education! The boys would be disposed to improve

themselves with all the ardour which the most sanguine preceptor could desire; their masters would find no habits of idleness to conquer: no perverse stupidity would provoke them; no capricious contempt of application would appear in pupils of the quickest abilities. The pupils would be all fit companions for each other; they would not have any new character to learn; they would improve by mixing with numbers; and, though they would love their companions, they would not, therefore, combine together to treat their instructors as pedagogues and tyrants."*

The supposed training by which Miss Edgeworth imagines children to be prepared for public seminaries at the early age of nine, has, in the present state of society, no chance of being realised. The carelessness of some parents and the ignorance of others, will unfortunately long continue to supply those establishments with the seeds of all vices; and large assemblages of young people will always defeat the best efforts which the few persons placed over them make to check the progress of evil propensities among them. Anxious parents must then defer exposing their sons, and, more especially, their daughters, to the worst of influences—the example of mischievous companions,—until their moral character is capable of resisting temptation. Under even the most favourable circumstances they cannot be formed to those moral and religious habits which will preserve them from the dangers of the scholastic life, before they have entered upon the third period of youth.

Public instruction is, in many respects, highly useful when the intellectual powers of the child are equal to the labour it imposes; and, with regard to the formation of the character, it has greatly the advantage over private education. However, the intercourse existing between the young inmates of large boarding schools is far from always possessing a beneficial tendency. It is said to be the best apprenticeship of life, on account of its analogy with the world; but, as in the case of this prototype, more virtue and self-control than young persons usually possess are required to pass through its ordeal, without contamination. When the moral habits and the intellectual development of young people enable them to attend public schools, we would prefer that it should be as day-pupils. This middle course, generally adopted in Germany, which combines the benefits of the two modes of education—private and public—would prevent many of the evils attendant on a long and

* *Practical Education.*

unnatural separation between parents and children; among others, the tendency which it has to weaken the ties of their mutual affection.

Many parents are apt to think they have no duty to discharge respecting the intellectual education of their children, from the moment they have consigned them to masters; they forget that their moral influence over them is much more powerful than can be that of a teacher. If they take an interest in their studies, and see that they earnestly attend to them, they will give efficiency to the training of the school. At the same time that they should refrain from any teazing interference with the peculiar province and business of the instructor, they ought to make inquiries about the behaviour and progress of their children; they ought occasionally to question them on the subjects of instruction in which they are engaged, and even examine them, whenever they are capable; they ought especially to sympathise with them when they come home elated with the pleasure of success at school. These marks of interest on the part of the parents will contribute to convince their children of the utility of the things which they are taught; it will secure to the father the continuance of his authority, and will facilitate the office of the instructor.

Parents, or the persons who supply their place, must take these observations into serious consideration. They should not only seize every opportunity to render the children better and wiser by religious, moral, and mental training; but they should also promote their physical development and innocent enjoyment by healthful exercises. Thus will they secure for them that normal state, the foundation of their future happiness and usefulness—"*A sound mind in a sound body,*" *acting under the influence of sound morality* (9).

CHAPTER II.

TEACHERS.

SECT. I.—THEIR DUTIES AND QUALIFICATIONS.

GREAT as is the influence of parents over the moral education of the child, that of instructors over his intellectual improvement is equally great. Success in instruction depends as much on the competency of the teacher as on the excellence of the method; it may even be said that his influence over the learners is more powerful. A zealous, kind, skilful, and well-informed instructor will forward his pupils with any method, because he will know how to fix their attention, how to stimulate their exertion; whereas an indolent, irritable, or ill-informed teacher, will never make good scholars, even with the best of methods.

It devolves on the instructor to inspire learners with a love of study, to direct their attention towards useful pursuits, to create in them the desire to learn what he wishes to teach, to proportion difficulties to their capacities, to keep up and gradually gratify their natural curiosity, to assist them in discovering rather than to impart to them what he knows himself. It is his duty to moderate the over-ardent, to stimulate the indolent, to encourage the timid, to direct the wayward, and to overcome the obstinate.

The instructor who is anxious to discharge the noble duties of his office and to respond to the high trust placed in him, will identify himself with his pupils; he will enter with delight, even with enthusiasm, into their pursuits; he will make every moment during which they are in his presence conducive to the improvement of their minds and hearts.

In order to carry on efficiently the work of education, the preceptor should blend cheerfulness of disposition with firmness of character; he should have great command of temper and inexhaustible patience; he should possess all the feelings of a parent and the indulgence of a Christian; he should excel other

men by the correctness of his conduct and the polish of his manners; for his example will have more force than his precepts. His address, deportment, and language, ought, at all times, to be such as to inspire his pupils with confidence, love, and respect. On the threshold of life, children unconsciously assimilate themselves to the persons in whose society they live. If it is desirable that they be honourable in their conduct and refined in their manners, their educator must be an accomplished gentleman.

Among the moral qualities which the professor in a public school should possess, may be particularly mentioned Justice; for he must distribute rewards and punishments as they are deserved; he must avoid injurious preferences among his pupils, and refrain from attending exclusively to boys of promising ability, to the prejudice of those who are less favoured by nature, in order to gain the dazzling honours of university prizes, thus resting the reputation of his school on a narrow, unjust, and dishonest foundation.

It is by his impartiality, and his love for the children committed to his care, that he will be entitled to govern them; it is by gaining their affection, that he will exercise over their minds that moral influence, which will enable him to direct them at his will and excite them to the noblest exertions. A taste for literary and scientific studies may be very effectively imparted by a kind and amiable instructor. It is only when personal influence does not exist, that recourse must be had to other stimulants. He who cannot rule by love must rule by fear. But, of all instruments of action, the most dangerous, undoubtedly, are emulation and corporal punishments. Without the greatest precaution, the first is but too apt to foster, in the bosoms of the young competitors, feelings of vanity, pride, ambition, envy, and jealousy; the second may sometimes debase a noble spirited youth, and inure him to perverseness.

"The usual lazy and short way by chastisement and the rod," says Locke, "which is the only instrument of government that tutors generally know, or ever think of, is the most unfit of any to be used in education. This sort of correction naturally breeds an aversion to that which it is the tutor's business to create a liking to. How obvious is it to observe, that children come to hate things which were at first acceptable to them, when they find themselves whipped, and chid, and teazed about them? Such a sort of slavish discipline makes a slavish temper. The

child submits and dissembles obedience, whilst the fear of the rod hangs over him; but when that is removed, and, by being out of sight, he can promise himself impunity, he gives the greater scope to his natural inclination which, by this way, is not at all altered; but, on the contrary, heightened and increased in him, and, after such restraints, breaks out usually with the more violence."* Another celebrated philosopher observes, "I condemn all violence in the education of a young mind brought up for honour and liberty. There is I know not what of servility in rigour and constraint; and I maintain that what cannot be effected by reason, prudence, and skill, will never be effected by force. I never saw the rod produce any other effect but to render the soul more cowardly and maliciously obstinate."†

Corporal punishment is nearly as degrading to him who inflicts, as it is to him who receives it. No gentleman would wish to be a flogger. In the English army, in which the flogging system holds its disgusting sway, and levels British subjects to the brutal condition of Cossacks or Negro slaves, no officer would ever think of claiming for himself the functions of the executioner. Let the teacher recollect that he, too, is a gentleman; let him respect himself if he wishes to be respected; let him also treat his pupils as gentlemen, and they will, in most cases, behave as such.

What has tended more than anything to throw ridicule on the teacher and lower his character in public estimation, is the ludicrous association of the whipping-rod and ferula with his office. The severity which parents formerly exercised over their children, justified a corresponding severity on the part of schoolmasters; and these instruments of torture became the indispensable appendage of their functions. So general was the barbarous practice of beating children, even to a late period, that most men of the present generation cannot think of their school-days without a feeling of ill-will and disrespect towards their old teachers.

It is consistent with despotic governments that the ferula of school tyrants should prepare children for the iron rod of their future political tyrants; but, in constitutional countries where every individual enjoys the noble privilege of a free man, the child must not be early taught that brute force is a principle of government; he must not acquire notions and habits incom-

* *Thoughts on Education.* † Montaigne, *Essais*, Liv. ii. c. 3.

patible with the dignity and duty of a freeman. Let, then, corporal punishment be banished from public instruction in Great Britain and Ireland, as it is in France. He who cannot conduct a school without the rod is unworthy of presiding over the education of youth.

The work of education will be successfully carried on without resorting to disgraceful blows, if the master know how to excite in his pupils a taste for order and study; if he render instruction interesting by his manner of imparting it; if he enforce discipline by firmness and justice; if, finally, he inspire love and respect by an affectionate and dignified deportment in all his dealings with them. But if, on the contrary, the master be hated, his teaching will be despised, his advice received with suspicion, his remonstrances and punishments will have no effect.

SECT. II.—PREPARATORY STUDIES OF THE TEACHER.

The teacher who is fully impressed with the high responsibility attached to his profession, who does not wish to make dangerous experiments on the first young minds which are confided to his care, will prepare for the difficult office of educating, by mental as well as by moral discipline. As the authority of his words derives its weight from the soundness of his understanding and the depth of his learning, he should not neglect any opportunity to improve and enrich his mind: there is no time at which he should cease to learn. He should particularly direct his attention towards perfecting himself in the department of knowledge which is more immediately the object of his teaching, without, however, neglecting general useful information. An instructor can always find the opportunity to turn to account every thing with which he is acquainted. In fact, he cannot properly fulfil his task, no matter how limited his sphere of action, if he does not know more than he professes to teach.

An instructor should possess great powers of language; for he must be able, not only to convey in the clearest and most forcible way the information he wishes to impart to his pupils, but also to encourage and admonish those who do not bring from home natural dispositions to learning:—just praise and reproof, dealt out in appropriate and impressive words, are more effective than corporal punishment. He must be able to adapt his language to their different ages and capacities, to explain the reasons of

the exercises he imposes on them, and to unfold to them all the advantages which may accrue from the particular information at which they aim, or from the particular tasks which they are desired to perform,—thereby supplying them with powerful motives of study. In public instruction there are few qualifications more necessary than the power of extemporaneous delivery. This happy talent brings the mind of the professor into closer contact with that of his pupils, than the reading of written lectures; it enables him to repeat what has not been fully understood, to introduce illustrations as they are required, and to diversify his manner or language according to the impression made on his young auditory as perceived in their countenances.

But extemporaneous lectures, to be really useful, must be founded upon a practical knowledge of the dispositions and advancement of the students; and there is no better means by which this knowledge may be acquired than by an intercourse with them in the way of examination and conversation. The delivering of lectures to a class would not be sufficient to create intellectual habits in learners, if unaccompanied by examinations. Skill in conducting these is, therefore, essentially necessary to qualify the professor for the successful discharge of his public duty.

A person teaching his native tongue abroad, should know critically that of his pupils, as well as his own; for he must be able, when a difficulty occurs in a foreign author, to render readily, accurately, and perspicuously the original thought, both to make it clear to his pupils, and to set them the example of correct and elegant expression; he must also have it in his power to correct the many errors which young persons are liable to commit, when translating from a foreign idiom either orally or in writing, and thus to assist them in making that language instrumental to improvement in their own. He should be a thorough grammarian and philologist, so as to be able to adduce rules in support of his correction, and to explain the mechanism, formation, and derivation of language.

Linear drawing, which supplies the deficiencies of descriptive language, is another acquirement indispensable to the instructor. It may be made a most useful instrument of teaching, even in the humblest school. In the exact, the natural, and the experimental sciences, especially, he who has a command of this art is never at a loss how to render the most intricate details clear, intelligible, and interesting to his auditory. One of the great difficulties which are met with in understanding a lecture on

science, arises often from the false notions to which incorrect diagrams lead. To the professor of languages linear drawing would prove equally useful, as it would enable him readily to present to his pupils just notions of many objects, the foreign names of which have either no corresponding terms in their own language, or are translated by words not familiar to them, and consequently conveying to them no clear idea of what is meant. Skill in drawing is a powerful auxiliary in oral instruction; for visible illustrations, by bringing the perceptive powers in aid of the intellect, fix the attention of the hearers more intensely, and disclose the thought of the lecturer more forcibly, than could be done by the most minute verbal details. The celebrated Cuvier used, in his lectures, to resort to the chalk and the black board, whenever he perceived that he was not fully understood by his numerous auditory; and their approbation generally testified the success of his illustrations. Sir Charles Bell offers another striking example of the importance of drawing to a scientific teacher; for his admirable lectures would have lost half their effect, had he not constantly illustrated his ideas by means of his skill as a draughtsman.

Not only should the educator's acquirements, capacity, and moral character be of a high order, but he should aim at professional skill; he should understand thoroughly the art of instructing, of educating the young. The possession of a good education, or of much information, does not necessarily imply the power of transmitting either: a man may be an accomplished scholar or an adept in science, and, yet, be an indifferent teacher. To stoop from the pride of superior attainment; to conceive even the embarrassments that entangle the beginner; to become identified with the feelings and faculties of children; to anticipate and remove the obstacles in their way to knowledge; to curb and regulate their tempers, and, what is still more difficult, one's own; to awaken and sustain attention, and know when to stop, so as to avoid fatigue; to lead by easy steps, through a path which to them is a rugged one, and strewing it with flowers instead of thorns; to slacken one's own steps, in order to keep pace with the pupil, instead of expecting or insisting on gigantic strides; all this is the result of long and careful training; it demands a rare assemblage of qualities, and can be effected only by a person of superior abilities.*

The educator should make himself perfect master of physi-

* See James Pillan's *Principles of Elementary Teaching.*

ology, moral science, and mental philosophy; the instructor, especially, should study mental philosophy, which contains the fundamental principles of the art of teaching. Education is, in fact, the most useful part of the science of the mind. It may be considered as a science in itself: it has its fixed laws, and the principles on which it is founded are drawn, by inductive reasoning, from the physical and intellectual organisation of man, as also from his social condition; it demands, in order to be well understood and properly applied, the deepest thought and the most patient investigation. Now, if this be so, we would ask how a man could know this science any more than that of mathematics or astronomy, without having studied it, or having even thought about it? If there be any such art as the art of teaching, we ask how it comes to pass that a man is considered fully qualified to exercise it without a day's study, when a similar attempt in any other art would expose him to ridicule. The profession on which all other professions depend demands a more severe apprenticeship than any, because it is the most important in its effects, the most comprehensive in its objects, and the most intricate in its details. It must be acquired in normal schools, or by practising under eminent professors, and by studying the most important works which have been written and are daily published on the subject of education.

Normal schools, however, conducted as they usually are in England and France, do not sufficiently take into consideration the primary wants of the pupils. M. Salvandy, minister of public instruction under Louis Philippe, has proposed a reform in this department, which is much needed. In adverting to the subject he says, "Our pedagogical institutions have been calculated to add instruction to instruction; but the science of teaching and, especially, the science of education, are taught nowhere. Our special schools make grammarians, Latin and Greek scholars, mathematicians, and philosophers; nothing shows that they prepare their pupils to be professors and educators."* They, in truth, forward them in every department of knowledge, except the one which is the most useful to them, namely, a knowledge of the human constitution, physical, moral, and intellectual. They are completely silent on the science of education and on the art of teaching. The characteristic feature of the instruction of such establishments ought to be the predominance of pedagogical subjects, consisting chiefly in lectures on the history of

* *Rapport au Roi*, Dec. 6, 1845.

education among the most civilised nations, in the study of the faculties as regards the training of children, in an investigation, explanation, and comparison of the best methods of tuition, and in a minute inquiry into the duties and qualifications of the teacher.

The educator must have a thorough knowledge of the human faculties and propensities; for they are the materials on which he has to operate. He must be able to distinguish the shades of difference which exist in the various dispositions and capacities of children; otherwise he could not discriminate where the blame should end and where the praise should commence; nor can he assign suitable tasks to their different degrees of intellect. He must exercise and bring to maturity their intellectual powers; he must foster and cherish in their hearts noble and generous sentiments; he must devise and prosecute the best modes of sowing and cultivating the seeds of knowledge.

With a view to study more completely the natural laws which govern the physical, moral, and mental constitution of man, the educator ought not perhaps to neglect phrenology. Although all the principles of this science are not generally admitted, an investigation of the doctrines of its most eminent votaries could not fail to produce useful results: already it has drawn forth many interesting facts respecting the functions of the brain and the nervous system. Alchymy, absurd as it was, has led to very important discoveries; it was the parent of chemistry. How widely soever the phrenological theory may differ from received notions, when we consider the number of its advocates, and the eminence of some of them, we cannot refrain from thinking that there must be in it something worthy the attention of those who sincerely and earnestly wish to study the faculties and propensities of childhood.

SECT. III.—IMPORTANCE OF THE TEACHER'S OFFICE.

The teacher who is in possession of the qualifications and professional knowledge which we have but feebly sketched, has in his power to accomplish extensive good. His influence on society is incalculable; he is the best promoter of man's prosperity in life, the true apostle of civilisation. His office is, in reality, the most important; for, as Plato remarks, and Barthélémy after him, "On the education of youth depends the fate of

empires."* "I will," observes Goldsmith, "be bold enough to say that schoolmasters in a state are more necessary than clergymen, as children stand in more need of instruction than parents."†

The learned professions derive their respectability and consideration from the knowledge which their duties are supposed to require, from the responsibility which they assume, and the liberality with which it is thought they would sacrifice every expectation of profit for the advantage of those who confide their dearest interests to them. Does the profession of the educator yield, in this respect, to any other? Does it assume less responsibility? Does it exhibit less self-denial, less zeal for public good? Surely not.

The physician operates on matter, the teacher on mind; the influence of the physician is confined to the individuals who are under his care; whereas the influence of the teacher extends, through the virtues or vices, through the knowledge or ignorance of his pupils, to the whole community and to succeeding generations. Can there be a doubt which of the two professions is of greater importance to society?

If, for the most part, we yield the direction of our conscience to the care of the clergyman, if we trust our fortune and our good name to the abilities of the lawyer, to the educator we implicitly abandon what is equally dear to us—the direction of the minds and of the hearts of our children,—their success in life, their happiness in this world, and, perhaps, their eternal condition in that which is to come. High as is the position of the legislator, as the guardian of public liberty and happiness, that of the instructor is still higher; for laws, to be efficacious, must already exist in the manners and habits of a nation; and these, if not the creation of the instructor, are much under his influence, and depend no less on his example than on his tuition. He who thoroughly fulfils his task, is more than a parent. It is the teacher who makes the man, the citizen, the living soul.

There is no profession more responsible and more elevated than that which, as Dr. Thomas Brown beautifully expresses it, "has the charge of training the ignorance and imbecility of infancy into all the virtue, and power, and wisdom of maturer manhood, of forming, of a creature the frailest and feeblest, perhaps, which heaven has made, the intelligent and fearless

* *Voyages du Jeune Anacharsis.* † *The Bee. Education.*

sovereign of the whole animated creation, the interpreter, and adorer, and almost the representative of the Divinity."*

Lord Brougham justly appreciated the high position which the educator ought to occupy in modern society, when he said, "The schoolmaster, and not the cannon, will henceforth be the arbiter of the world. * * * His progress leads to a far more brilliant triumph, and to laurels more imperishable than the destroyer of his species, the scourge of the world, ever won." †

SECT. IV.—SOCIAL POSITION OF THE TEACHER.

We have seen what is the position in society to which the educator is entitled; let us now examine how he stands in this country. Many consider themselves his superiors, who not only are greatly his inferiors in mental and moral acquirements, but whose pursuits in life are much beneath the occupation in which he is engaged. He shares, in fact, in the neglect (alluded to in a preceding Book) to which an undue and exclusive regard for birth, titles, and money, leads the English to consign all the votaries of science and literature. But, on this subject, we prefer to state the opinions of English writers, lest our own should be taxed with partiality as coming from a foreigner.

Sir David Brewster, after having contrasted the disgraceful indifference entertained here for the professors of science, with the high estimation in which they are held on the continent, and the honours conferred on them by all enlightened governments, goes on to say, "No statute, indeed, disqualifies them from holding the titles which reward the services of other men; but custom, as powerful as statute, has torn all such hopes from their grasp; and, while the mere possessor of animal courage, one of the most common qualities of the species, has been loaded with every variety of honours, the professor of the highest endowments of the mind,—he whom the Almighty has chosen to make known the laws and mysteries of his works,—he who has devoted his life, and sacrificed his health and the interests of his family, in the most profound and ennobling pursuits, is allowed to live in poverty and obscurity, and to sink into the grave without one mark of the affection and gratitude of his country. And why does England thus persecute the votaries of her

* *Philosophy of the Mind.* † *Speech in Liverpool*, 20th July, 1835.

science? Why does she depress them to the level of her hewers of wood and her drawers of water? It is because science flatters no courtier, mingles in no political strife, and brings up no reserve to the minister, to swell his triumph or break his fall. She is persecuted, because she is virtuous; dishonoured, because she is weak."*

"Mere teaching, like mere literature," says Dr. Arnold, "places a man in rather an equivocal position: he holds no undoubted station in society by these alone; for neither education nor literature have ever enjoyed that consideration and general respect in England, which they enjoy in France and in Germany."†

Far from meeting with liberal encouragement, the teacher is denied what he is entitled to, courtesy as a gentleman, esteem as a man of cultivated mind, and gratitude as a benefactor. Such a state of things is worthy of the feudal times, when it was the interest of political rulers to keep the people in darkness; for to discourage the teacher is to encourage ignorance. If, as has been justly remarked, his social position be a perfect index of the real mind of society on the subject of education, we must only deplore the spirit of the present age. "Nothing can more clearly indicate a low state of public morals than the vulgar disrespect and parsimonious remuneration with which the teacher is sometimes requited."‡

The depreciation of the teacher's useful services is particularly seen in the case of resident tutors and governesses. "The ill-treatment to which," says a modern writer, "this class of persons is too frequently exposed in private families, has lowered their attainments and moral bearing; and the lowered character and pretensions of instructors, by an inevitable reaction, has diminished the respect in which they are held by parents, subjecting them to a still more galling ill-treatment. This vice in the social arrangements, which, by the bye, is, in a great degree, peculiar to the British isles, could not exist, if parents possessed a requisite knowledge of the true value of education, and of the qualities it demands in the instructor."

"For the higher class of male instructors, it is true, the prestige of a university education, and a prevailing reverence for the clerical character, do something towards raising them above the

* *Decline of Science in England.* *Quart. Rev.*, Oct., 1830.
† *Life and Correspondence.* A. P. Stanley. Let. 193.
‡ Mrs. Ellis. *The Women of England.*

condition of menials, — forcing from the most ignorant and vulgar-minded some show of decent respect; but, even in their case, the avarice, which seeks to remunerate their noble services by the lowest possible salary, gives a true measure of the position they hold in the estimation of their employers. Much worse does it fare with the teachers of minor academies, and tutors brought into houses of an inferior caste; but, of all the degraded, dispiriting positions in which intellectual and virtuous poverty can be thrust, that of the governess is commonly the most revolting and the most disgraceful to the society by whose opinions it is determined."*

In the great majority of cases, when parents place their children in the hands of a teacher, they absurdly wish him to do every thing for them; and not only do they neglect giving him assistance, but they frequently take every pains to render the fulfilment of his task impossible. By the little regard or sympathy which they evince for him, they instil into the hearts of young people feelings of antipathy against him, which counteract the effect of his best exertions: few parents ever visit him as a friend, or invite him to their houses; some make their children the bearers of disagreeable messages to him, or listen with complacency to their distorted and malicious reports of him, or his school; while others most incautiously express, within their hearing, opinions unfavourable to him, and calculated to lower him in their estimation. They require of him the greatest service which a man can expect from another; and yet, in their unconsciousness of the importance of that service, they commonly treat him with the most barefaced ingratitude, and are often even shamefully remiss in fulfilling their pecuniary engagements towards him, taking as little notice of his demand for fees so painfully earned—nay, a debt so sacred—as they would of a tailor's bill.

Although unacquainted with the details of teaching, or the relative worth of the different branches of knowledge, many parents, in the absence of a regular recognised system of instruction, presume to dictate to experienced teachers the course which they ought to pursue; they sometimes value most what is least important, and are regardless of their children's improvement in really useful acquirements; not a few imagining that education consists solely in the learning of lessons, and, anxious to obtain immediate and ostensible value for their money, judge of the

* *Journal of Education*, No. 17.

merit of a teacher by the number of tasks imposed on his pupils; some unreasonably demand a general exemption from punishment for their children, and others are so unmercifully cruel, that we have known boys to be removed from school for not being, as the parents thought, sufficiently flogged. Thus are educators selected or discarded on the most frivolous and unwarrantable grounds.

There are some parents also who, always ready to make the teacher an object of terror to the young, carry inconsistency so far as to complain to him of their idleness at home, or to insist on his punishing them for faults committed out of school and under the paternal roof. Unable to maintain their own authority, they give their children habits of indolence and insubordination, and, afterwards, thoughtlessly call upon the schoolmaster to remedy the evils of their own mismanagement; but, in most cases, his efforts must be vain; and he is blamed for a failure which ought to be attributed solely to themselves. These and innumerable other evils in ordinary education will continue to exercise the most baneful influence on society as long as youth is abandoned by the state to the ignorance of parents, and to the pretensions of every adventurer who speculates on that ignorance. The unlimited and unprotected liberty of education is the plague of Great Britain.

SECT. V.—INCOMPETENCY OF TEACHERS ATTRIBUTABLE TO PARENTS.

The office of instructor ought, perhaps, to rank with the magistracy; and yet it is the last that any one will choose. It is, with few exceptions, embraced by persons of inferior merit. It is taken up as a last resource by those who have failed in every other calling. But if so many incompetent persons crowd the avenues of tuition, the blame lies on society. Education is not generally appreciated, although its eulogy is in everybody's mouth; hence the business of teaching does not secure a respectable social position; nor does it offer a fair chance of realising an independence—two powerful motives by which men of capacity and information are guided in the choice of a profession. The art of educating has, consistently with the mercantile habits of the people, been made a trade, and that trade, from the ignorance and indifference of society in educational

matters, has become discreditable, laborious, thankless, and unprofitable.

Many parents, being unacquainted with the principles and the essentials of education, are unable to judge of the competency, or estimate the merit of an instructor, and are often influenced in their selection of one by mere pecuniary considerations. They absurdly imagine that any teacher is good enough for a very young child; to a paltry economy they sacrifice his future prospects: they run the risk of his imbibing errors and evil habits which no expense or labour can afterwards effectually remove. The fallacies of such notions is sufficiently proved by what precedes, and will be rendered more obvious still throughout this work.

All the anxiety, the trouble, the sacrifices of the instructor, without mentioning his actual services, are above what gold can repay; and yet how many wealthy mothers are there who, while they are extravagantly expensive in their dress, their household, their table, their equipages, and all other personal expenditure, aim at sordid economy in everything regarding the education of their children. They never purchase any but a high-priced article of jewellery, dress, or furniture, aware that it is always the most serviceable; yet, forgetting that none but incompetent teachers are willing to accept low terms, they do not hesitate to offer to any person who would undertake the education of their children what an upper-servant would scorn to accept! Those who make cheapness the highest recommendation of instruction, lay the foundation of their children's misery. They must take the blame on themselves if those children do not turn out as well as they expected.

What Plutarch said on this subject is applicable at the present day:—"There are parents who carry so far the love of money, and indifference for the good of their children, that, from a sordid economy, they select for them tutors without any merit, and whose ignorance is always cheap. Aristippus made one day a pertinent answer to one of these despicable men. As he asked the latter fifty drachms for educating his son, 'How!' exclaimed the father, 'with that sum I would purchase a slave!' 'Do so,' said Aristippus, 'and then you will have two.'" *

The preposterously humble position assigned to the teacher in society, the denial of sympathy for his exertions, and the little value set on his services, are fraught with evil. Slighted and

* *Of the Education of Children.*

discouraged as he is, he naturally retaliates on society, by a reciprocation of disregard for the parents and indifference for their children; aware, besides, that an increase of ability will not meet with its due reward, or extra solicitude for his pupils with grateful acknowledgment, he feels no desire for self-improvement, or exertion beyond the strict boundaries of his duty. He is, perhaps, of all professional men the most indifferent about acquiring information concerning his profession. Physicians, chemists, or engineers, read with eagerness everything which relates to their pursuits, and investigate every new discovery which proposes to improve their respective arts; but the greater number of instructors, female teachers especially, although generally unacquainted with the art of teaching, to which they have served no apprenticeship, seldom open a book on education, or inquire into the various methods of instruction which daily appear. It must be said also, in justice to the profession, that in many instances, the scantiness of their earnings does not permit them to purchase the books which they ought to study; and, in the case of resident instructors, time is rarely allowed them for self-improvement.

Every attempt which has been made in this country to diffuse among teachers the information they so much need has proved unsuccessful. In other departments of knowledge, journals, magazines, and reviews, whether literary or scientific, medical, mechanical, or even phrenological, prosper under the auspices of a large community of readers; but the various periodicals which, for the last twenty years, have appeared in succession on matters relative to education, have not been able to prolong their existence beyond four or five years; and, at this moment, the two small periodicals on education, which are published monthly in England, meet with very inadequate support.

In this anomalous state of things, with an ignorance of the requisites of education on the part of both parents and teachers, we cannot be surprised to see so many of the latter promise more than they can accomplish, unqualified, as they are, to fulfil the important duties of their office. How frequently do we hear of governesses who undertake to teach everything—fancy-work and history, penmanship and geography, arithmetic and composition, dancing and astronomy, French, music, painting, and we know not what else. Jennies of all trades, who give their pupils a *very liberal* education for a *very trifling* remuneration.

A respectable professor of mathematics would not venture on

teaching the fine arts, nor a professor of music the sciences; no man, in fact, but a quack, would lay claim to the mastery of two opposite branches of instruction; and females, mere girls, even, who have received but a very ordinary education, will often undertake to teach the most heterogeneous medley, enough to engross the attention of a dozen men of the most comprehensive minds. But so great is the blindness of some parents, that they confide the education of their young families to inexperienced women, who can know nothing of the art of teaching, and very little of the things which they profess to teach; for, in most cases, their limited means have not permitted them to obtain a liberal education; in fact, owing to the unjust depreciation in which the ministers of education are held, none but persons in the inferior walks of life adopt teaching as a profession, with the exception, perhaps, of a few who are driven into it by misfortune.

SECT. VI.—MEANS OF RAISING THE PROFESSION IN PUBLIC ESTIMATION.

The career of instruction will continue to be pursued by persons of inferior merit, so long as it does not offer to its candidates the consideration bestowed on the learned professions, and which is claimed by those who, in the consciousness of self-dignity, feel their own superiority. It is the business of a government truly anxious for the good of the people to employ every means to raise in public estimation the educational office. Parents have it not in their power to effect any change in this respect: they are, in general, incompetent to decide what is to be taught, and how it is to be taught; nor have they any means of judging of the competency of teachers; the government alone can ascertain their qualifications, elevate their general standard of attainments, prescribe the most useful course of instruction for the different callings of society, propagate the best methods of teaching, and institute normal schools as a first element of national education.

Whilst the liberty of studies should be unrestrained, the liberty of teaching should be subjected to the restrictions demanded by common prudence, by the well-being of society, and the respect due to the profession. Instructors should be required to prepare seriously for their office; they should pass examinations, take degrees, and obtain diplomas. The art of educating and instructing should, in fact, be made a fourth learned profession.

Upon these grounds a recompense worthy of the service would be offered to the teacher, who would thereby rise in public estimation; for, in this country, more than in any other, wealth is the test of respectability. Superior minds would then be found to devote their time and abilities to tuition; so that the average of capacity, information, and independence becoming high among the members of the educational profession, their social position would be proportionably elevated.

In the mean time, teachers ought to unite their efforts to redress the grievances under which they have too long suffered. By holding conferences and forming associations among themselves, they could compare each other's views, and, hence, improve their methods of instruction, raise their qualifications, and elevate their professional character. By these means, also, they would render more efficient services to the community; and, finally, influence as well as enlighten public opinion.*

However, none of these means, indispensable as they are for elevating the profession and, consequently, the standard of morality and intellectuality among the people, would be so effective as the interference of the State in organising for all classes a liberal system of National Education, in rescuing teachers from the control of parents, and in creating among them a gradation of rank and emolument, analogous to that which exists in the church and the army. A prospect of advancement is indispensable, to attach superior minds to any career or profession. The government should confer honorary distinctions, or pensions, on the teachers who, by the length of their services, the success of their methods, the improvement of some branch of instruction, or by any other means, have effectually promoted the objects of education and thus advanced the great cause of humanity and civilisation.

"If this were the country it boasts itself to be," says Mr. Wyse; "if it were a country in which the public really aspired to elevate the human mind, to assign to intellectual superiority its proper station, long since its laws would have regarded the profession of teacher as one, in a great degree, invested with paternal and religious rights.†" This eminent educationist, not satisfied with

* The Royal College of Preceptors, lately instituted with a view to advance education by the improvement of educators and schools, has already effected considerable good towards this desirable object. If the generous efforts of its enlightened members are responded to by the public, a boon of inestimable value will be conferred on this country.

† Speech in the House of Commons.

showing the necessity of education reform, has, with a philanthropy and a superiority of talent, which have raised his name among the highest and the most revered, laid out a complete system of national education, the practicability of which is based on the combined interests and powers of the government and the people. If this system be adopted, it will infallibly raise, not only the social position of the educator, but the moral and intellectual character of the British nation.

On the Continent, in France especially, although the profession is not much better remunerated than in England, professors, like all scientific and literary men, enjoy the consideration which their talents, learning, and services may claim. They move in the first circles; the career of honours and fortune is opened to them; capacity and knowledge obtain for them places of trust and elevated positions in society. Many of the university professors have held, and many still hold, a distinguished rank among the representatives, ambassadors, and ministers of state. We have not heard that professors of British universities or scientific and literary men, however high they stand in the learned world, have, as such, obtained any of those public offices to which every lordling has access, however destitute of information and intellect.

SECT. VII.—FRENCH TEACHERS IN GREAT BRITAIN AND IRELAND.

It is especially in reference to the learning of French in schools, that the degradation of the profession and the consequent incompetency of its members are pernicious to learners. Every foreign adventurer can, with some probability of success, offer himself as a teacher of his own language, if his terms be low and his promises high. People who cannot find employment at home, speculating on the prevailing taste for the study of foreign languages, go abroad to teach their native idiom, without any preparation. We are told by Goldsmith that, having gone to Holland with an intention of teaching English to the natives, it was only on arriving in that country he discovered that the knowledge of Dutch, of which he was completely ignorant, was indispensable for effecting his object. Many persons forget not only, like Goldsmith, to learn the language of their future pupils, but also, very frequently, their own.

The situation of French teacher in seminaries for either boys or girls, is often filled by persons who seek it as a relief from

distress, and who, incapable of rising at home above inferior occupations, are, for the most part, utterly unacquainted with the genius and elegancies of their native idiom, or by young foreigners who, on landing in this country, are glad to assume the office, however low the salary, because it at once secures them a livelihood and procures them the means of learning English. But, so soon as they have acquired a smattering of the language, they seek a more independent and more lucrative occupation, or they return home to avail themselves, behind the counter of some mercer in Paris, of the advantages which they expect from this new acquisition. Thus, is a succession of inexperienced and incompetent teachers kept up in those establishments.

These foreigners, under the many difficulties incident to their peculiar position, try their first experiments in teaching on the unfortunate children confided to their care. Not being well acquainted with the language of their pupils, they cannot, with any profit to them, or satisfaction to themselves, carry on the work of instruction. Their broken English is an incessant cause of merriment and inattention on the part of young people, often prejudiced against them and naturally more inclined to indulge in sport, than to make the effort necessary for understanding them. Not only are they unable to convey much serious information, but their inexperience and the little moral authority with which they are invested, do not even permit them to maintain a proper discipline among their pupils.

This department of instruction is equally defective when it falls into the hands of English persons, especially females. The culpable carelessness of parents in this respect, causes them easily to misplace their confidence. They are usually satisfied about the competency of any teacher who tells them he has studied under a foreigner of repute, or has been on the continent; although he may have received only a dozen lessons from that foreigner, or have been abroad only six or eight weeks; although even he may be so ignorant of the language as to be but a day in advance of his pupil and be obliged to prepare every lesson before giving it. This sort of imposition is practised to a surprising extent in this country; and yet it can scarcely be otherwise in a social constitution so favourable to quackery. Advertisements and puffs reign paramount here; and the English have the reputation of being the most easily gulled people in Europe. Every thing is matter of speculation in this mercantile community; and objects of education being considered as articles of

trade, are the more readily brought down to the lowest price, as their nature seldom admits of a prompt exhibition; the purchaser—the parent—is unwilling to pay much for things which he is compelled to take upon trust, and often is as unable to estimate their quality as the consumer—the child—is careless of their acquisition. Second-hand French will continue to supply the market abundantly, as long as there is a demand for cheap intellectual commodities.

Women may be very good educators, but they certainly are, in general, very bad instructors. The piety and affections which fill their hearts, beget that earnest solicitude for the well-being of childhood, which is the best promoter of moral training; but the superficial knowledge, which, in the present anomalous state of national education, society has allotted to them as their share of instruction, does not usually permit them to impart solid information to their young charge. It would, perhaps, be difficult to find a woman really well informed, who has been educated exclusively by female teachers. Women, with few exceptions, cannot properly direct the intellectual faculties of children, because they rarely study the constitution of the human mind; nor can they teach the principles of language, because they know but little of the laws which govern the relations between words and ideas. Their scanty stock of knowledge does not permit them to confer on their pupils the intellectual benefits of the comparative course, which demands, on the part of the instructor, extensive and deep information. They may, however, by the adoption of the natural process, most effectually teach a young child how to speak a foreign language, provided they can speak it themselves, and reside in the family. Their communicative dispositions and unbounded sympathy for infancy, guide them admirably in administering to their first need of language.

The inmates of convents, and all monastic seminaries which enforce upon them seclusion from the world, constitute another class of inefficient teachers of living languages; for, even granting that monks, nuns, or other recluses may have, at one time, been acquainted with the living languages which they pretend to teach, they must rapidly forget them for want of opportunities of practising them. The words, the phraseology, and the idioms of a language, together with its pronunciation and accent, should occasionally strike the ear in order to be reproduced by the tongue in its genuine purity. Foreigners themselves require to visit at times their native land, to refresh their memory and their early

impressions of language. A person who has been a long time abroad, habitually speaking the language of the country where he resides, and who has ceased to hear his vernacular tongue, or, what is worse, who has been accustomed to hear it spoken incorrectly by his pupils or other persons, is not likely to preserve it uncontaminated and retain a command of it. Illustrations of this fact will be found in the last Section of Book XI.

In the greater number of classical academies, living languages fare worse, if possible, than in convents; because in such establishments they are only of secondary consideration, and are often even looked upon as interfering with the business of the school. Those who teach them have a difficult part to play; for the heads of such establishments are generally little versed in those languages; and, from a natural feeling of pride, they do not encourage a branch of instruction which, we are to understand, they have not thought it worth their while to acquire themselves.

School-boys being thus led to believe that the living languages are mere accomplishments of a secondary order, pay but little attention to them. They learn the lessons allotted by the foreign teacher, after they have toiled through their Latin and Greek studies, on which alone the head-master insists. The foreign living language, thus looked upon as a work of supererogation and as an encroachment on their few moments of recreation, cannot meet with their sympathy; and what is learned with distaste, is necessarily learned badly. This evil cannot be easily remedied when the Principal is unacquainted with the foreign language; because, being unable then to judge of the progress of the learners, or of the abilities of their teacher, he has no control over this department of instruction in his school.

Until modern languages are, in every respect, on a perfect equality with the ancient, in academical institutions, they will never be properly taught in those establishments by foreign teachers, whatever be their skill and information. We do not hesitate to declare again that, as long as instruction and the instructor do not stand higher in public estimation than they do now, learners will always be placed in the dilemma of studying foreign living languages either from their own countrymen incapable of speaking them, or from foreigners ignorant of the art of teaching and destitute of literary acquirements. (10.)

CHAPTER III.

METHOD.

SECT. I.—ON THE PRESENT NEED OF A METHOD OF LEARNING LANGUAGES.

WE have, in the introductory book, laid down the general principles on which should be founded a rational system of education; we will now, confining our attention to the particular object of this essay, briefly examine what ought to be the leading characteristics of a method of learning languages; and particularly take into consideration the most efficient means of shortening the period of classical studies without prejudice to the learners. "It is," says Burnouf, "by improving the methods of teaching, that we shall really, as desired by everybody, shorten the study of Latin."* More objects of instruction may enter in the scholastic course, when less time is given to each. "He who shortens the road to knowledge lengthens life."

Hitherto, the process of acquiring either the ancient or the modern languages, resting not on philosophical principles, but on mere tradition and routine, has been subject to fluctuation, and often marked by the strangest innovations. The mode of acquiring every department of the study has, at different times and in different countries, undergone modifications which form, at the present day, a confused mass of heterogeneous processes. This confusion must be removed by the introduction of a system in strict conformity with the nature of the subject, the laws of the mental constitution, and the exigencies of modern society.

It is particularly in the study of the principal languages of modern Europe that the want of a rational and universal method is much felt. These languages embrace so many different objects, and are learned under so many different circumstances—at home or abroad, by infants or adults, for reading or conversation, under the direction of native or foreign teachers,

* *Petite Grammaire Latine.* Prof.

with or without an assistant—that the diversity of lights in which their acquisition is viewed, has naturally produced a corresponding diversity in the mode of effecting it. Every teacher of languages, on commencing his profession, bewildered by this confusion of processes, many of which are in direct opposition to one another, has to contrive a method for himself, or he must blindly follow the routine transmitted to him from past ages, with no other recommendation than its antiquity. The constant appeal to our forefathers in every thing which regards education, keeps the mind in bondage and plunges mankind into apathy. The world is now older than it was in the days of our ancestors: they were our juniors; they had only their own experience, we have theirs in addition to ours; our minds are fed in our childhood with the fruit of their maturity; we start in our career with many advantages of which they were deprived: we, consequently, ought to know more and be more capable of discerning right from wrong. It is then contrary to reason to sacrifice our views to theirs, and to make their opinions the standard of our conduct.

A comprehensive system is, at the present day, much needed, for the safe guidance of teachers and learners in this department of instruction. Such a system, in order to be general in its application, must embrace all the objects proposed from the study of highly cultivated living languages; for in these will be comprised the comparatively few exercises requisite for learning Greek or Latin. It must not, therefore, be wondered at, if our strictures on this subject, although applying to foreign languages in general, advert more frequently to the modern than to the ancient. When the objects aimed at are common to both, the process of learning will, with some trifling exceptions, be found the same; and, whenever they differ, a particular course will be prescribed. However, as it would have been difficult to explain our system in general terms, we have more especially selected for its application, the French language, as being the most generally learned in Europe.

The observations we shall make in the present chapter on the fundamental principles and the essential characteristics of a rational method, will, we hope, enable the reader to enter more readily into the spirit of our system, and follow its details more easily. As we proceed, we shall be more explicit, that nothing may be left to chance or ignorance; for the inexperience of teachers, as well as of learners, often adds to the difficulties

attendant upon study. If rational methods were more general, apparent dulness and perverseness would be more rare than they are at present.

Methods are necessary not to ordinary minds only; the most creative genius may derive incalculable benefits from them, and has often been indebted to them for its highest conceptions. "If I have any advantage over other men," said Descartes, "I owe it to my method."*

Those who devote themselves to the search of truth and the acquisition of knowledge, cannot be too careful in the choice of the instrument with which their object is to be effected. It is, however, difficult to decide what is the most judicious mode of proceeding in the pursuit. The science of method has yet to be created. "What!" exclaims Joseph Droz, "for the last century, our arts have made immense progress, our manufactures have undergone admirable improvements, and the art of instructing men should remain subject to the inconvenience of an absurd routine! This is a melancholy proof that fathers think more of their fortunes than of their children." It is time to reject the worn-out machinery of our ancestors. Let us apply to mind, as we have long done to matter, new powers, new combinations, and new processes. Let a rational method of learning languages bring men of all nations into communion as steam has brought them into contact.

SECT. II.—CHARACTERISTICS OF A GOOD METHOD.

1. *A good Method subdivides the subjects of Study.*

It is in the faculties of man, and in their mode of action in the acquisition of knowledge, that we must seek for the general principles on which is based Methodology, or the science of method. The application of these principles to any one department of instruction constitutes a particular method, and varies according to the nature of the study and the ends proposed. Let us examine what are the characteristic features of the method by which languages may be best acquired.

Classification is the fundamental law of a rational method; for we should ascertain what things are to be learned, and in what order they are to be learned, before we think of the mode of

* *Discours de la Méthode.*

learning them. Besides, the mind cannot effectively attend to several distinct things at the same time, if these are all equally new; it must be abstractedly engaged on one at a time. The study of language must, therefore, be subdivided into the branches which constitute the leading objects proposed from it, namely, the arts of understanding oral expression, of reading, speaking, and writing. It is essential to distinguish these ultimate objects from the exercises which, although requisite for attaining them, are, for the greater part, of little utility after the period of study. For want of sufficient distinction on this point, the ends and the means have often been confounded together, and the former sacrificed to the latter.

The principles of subdivision and gradation, by concentrating the powers of the mind on one thing at a time, are most powerful in instruction, as well as in the affairs of life: a rational method of learning languages, in conformity with these principles, ought to indicate the successive operations which are necessary at the different stages of the acquisition, so that each may suitably prepare for that which follows, and that all may gradually concur to the end proposed. It ought to prescribe the order in which the different departments of the study may be successively entered upon. Throughout the course, and particularly at the outset, an accumulation of difficulties should be avoided, not to discourage the learner and thus damp his progress.

As each object of study is secured, it becomes a starting point for other acquisitions. Each department of the language being successively rendered habitual by appropriate exercise, the mind will soon grasp them all with ease, whatever be their number. Such is the nature of the human mind that it embraces a multitude of elements without confounding them, when it is fully acquainted with the subject to which they belong; but two objects suffice to perplex it, when it is engaged in acquiring them: if the beginner does not consider these two objects apart from each other, he confounds them, and may fail in knowing either. A language must be the more easily mastered, when all its parts have been taken separately and duly considered one after another. "Divide and conquer," the maxim of Machiavelli, "is a principle," said Dr. Johnson, "equally just in science as in politics." *

In the subdivision of the study of a foreign language, the method should point out to the teacher and to the learner what

* *The Rambler* No. 137.

comes within the sphere of action of each, and should unfold the special exercises which are requisite for the attainment of each particular branch. The extent of study may then be determined according to the nature of the language, the wants of the learner, the circumstances in which he may be placed. When, for example, he only wishes to understand books written in a foreign language, whether ancient or modern, his object will be the sooner accomplished, if his attention be not diverted from it by extraneous exercise. One or two years may then suffice to acquire as much Latin as, by the common routine, is learned in five or six; and a large portion of time will then be available, within the usual period of education, for attending to those branches of knowledge which have of late become indispensable.

Time will also be saved and the period of learning again shortened, if the method be sparing of those preparatory exercises, which make the student forget the end in pursuit of the means, and which not only render his labour unprofitable, should he happen to change his course, but divest study of interest by concealing from him its ultimate and real object. Young persons are averse to the acquisition of any knowledge, the application of which is either remote or unperceived. If they are given only such exercises as are consistent with the end proposed and such as keep this end in view, they will be stimulated by their consciousness of the useful results to which their efforts may eventually lead. And as, on proceeding, they can apply their acquisition to practical purposes, success becomes a powerful incentive to exertion and a continual source of enjoyment: it is thus that a good method makes the learner find pleasure on the road of duty.

The details of the study should be so contrived that each learner may direct his attention to the objects best suited to his wants. The medical student will then learn to read the language, the mercantile man to write it, the traveller to speak it; those who propose to teach it will join theory to practice, and young people, who have much time in perspective, may attend to every department of the language.

2. *A good Method favours Self-Teaching.*

One of the chief characteristics of a good method consists in enabling learners to dispense with the assistance of a teacher when they are capable of self-government. It should be so contrived as to excite and direct their spontaneous efforts, and lead them to the conviction that they have the power, if they have the will, to acquire whatever man has acquired. The prevailing notion that we must be taught every thing is a great evil. The most extensive education given by the most skilful masters often produces but inferior characters; that alone which we give to ourselves elevates us above mediocrity. The eminence attained by great men is always the result of their own industry.

A rational method, by inciting the will of learners, brings their capabilities into action: it does not dispense with exertion, nor blindly force ready-made learning on the memory; it shows the way of studying, of making discoveries. It devolves on the teacher to excite in his pupils the desire, and furnish them with the means of improving themselves; for, without self-reliance and active co-operation on their part, all his instruction must be unavailing. He cannot advance them a single step unless they make corresponding efforts. There is a vague notion widely prevalent, that instructors are able, by a power inherent in themselves, to fill the minds of their pupils with learning in spite of them; but this is a sad mistake. The best informed teachers and the most elaborate methods of instruction can impart nothing of importance to the passive and inert mind. If even a learner succeeded in retaining and applying the facts enumerated to him, the mental acquisition would then be vastly inferior to that which the investigation of a single fact, the analysis of a single combination, by his unaided reason, would achieve.

As, in the present mode of public instruction, students spend less time with the professor of foreign living languages than they do with the classical teacher, it is the more necessary that they should be afforded inducements and facilities for self-instruction in those idioms. In any pursuit, they should not do with their teacher what they can do by themselves; thus, their progress will always be commensurate with their abilities, or their desire of learning, as also with the time they have for study in his absence, which, in every department of instruction, is usually

much longer than that which he can devote to them. He could then employ to their greatest advantage every moment he is with them, both in giving them the advice or explanations they require, and in imparting such information as may supply the deficiencies, or correct the errors of their books. In the learning of the ancient languages, the application of this precept would prove most beneficial, as it would tend to shorten the period of classical studies.

A language, more than any other branch of instruction, may, to a great extent, be acquired without the aid of a teacher; for it is based on imitation. Primitive languages were formed by imitation; the modern are derived from the ancient by imitation. "All languages," says the celebrated tutor of Elizabeth, "both learned and mother tongues, be gotten, and gotten solely by imitation."* As a child acquires, of himself, the vernacular tongue by imitating the living models, so does an adolescent learn foreign languages by imitating the written models: in either case, the frequency of *impressions* tends to secure the powers of *expression*. If this great principle were well understood and properly applied, it would bring the knowledge of languages down to the level of the meanest capacities, and, in a great measure, within the grasp of those whose pecuniary means deny them the advantage of teachers.

3.—*A good Method is applicable to public Instruction.*

One of the chief merits of a method is to render instruction accessible to all classes of society; for it is really useful, in a national point of view, only inasmuch as it is practicable for the great majority. In this age of liberty and progress, when every individual, however humble his condition, may select the career in which he thinks he can best secure his advancement in life, or serve his country, the machinery of education should be contrived with a view to this philanthropic object. To instruct the greatest number in the shortest time, and at the smallest expense, consistent with efficiency, ought to be one of the first aims of a system of national education.

In any community, even the most highly civilised, those who are capable or willing to impart information, are few in comparison with those who are in need of it. Teachers will therefore often be surrounded by large numbers of learners,—the larger

* Roger Ascham, the *Schoolmaster*.

in proportion as the knowledge to be taught is the more useful, as is particularly the case with foreign languages. Too great an assemblage of students, however, must be avoided. A lecturer may address as large a class as his vocal powers permit; the energy of his delivery and the efficiency of his instruction, increase even with the number of his hearers; but a teacher, whose office consists not only in imparting information, but in examining and exercising his pupils, cannot effectually, within an hour or two, teach more than twenty in a class. When the number of learners is limited, the professor can frequently call upon individuals to produce, to test, to apply the knowledge they have acquired; he can remove their doubts, correct their errors, and afford them opportunities for personal investigation. The subject of instruction being thus thoroughly handled and sifted, is considered in all its bearings, and fastens more firmly on the minds, than if the pupils were listeners only.

The little encouragement offered to the educational profession, by deterring many competent persons from embracing it, tends to diminish still the number of instructors; and the few who are willing to undertake the task are so miserably remunerated that, in their own defence, they endeavour to make up for the parsimony of parents by crowded classes. In this state of things, as it is impossible to collect into one class any number of pupils, whether children or adults, who can remain perfectly on a par throughout the course—since their age, capacity, inclination, time, and previous knowledge, must soon create considerable differences between them—it becomes urgent to adopt a method which shall provide for these diversities of progress in learners, that those who are below the average ability of the class may not be left in hopeless ignorance. It can be truly simultaneous only when it affords to persons of different degrees of proficiency the means of benefiting equally from the same master and the same instruction.

All the exercises and mnemonic lessons which require a teacher to attend separately to individual learners should, in public schools, be superseded by such oral instruction as is suitable and profitable to all the members of a class. However, as this is not always practicable; the mutual or monitorial process, which admits of endless variety of application, should be had recourse to, as the most effectual means of teaching large numbers and saving time and expense. While it brings the superior intelligence and knowledge of the higher scholars to bear upon those

who are less advanced in age and standing, it extends indefinitely the benefit of public instruction. No system should assume an exclusive form; it should, on the contrary, vary with the ages, capacities, and wants of the learners. A method, to be truly rational and useful, must bring the objects of study within the grasp of the meanest capacity; it should ensure the proficiency, if not of all, at least of a large portion of students. The invariable uniformity of the ordinary scholastic method, and its total disregard of the diversified circumstances of learners, are partly the causes of its ill success. Under its baneful influence, the great majority of boys pass through the classical course, without gaining an adequate knowledge of ancient literature.

The work of self-tuition, recommended above, and monitorial teaching, will greatly facilitate the adaptation of a method to public schools; because, in the first case, the improvement of learners, not depending on the professor so much as on themselves, will always advance according to their respective application and industry; and, in the second, the diligent students, instead of being kept back by the indolence or dulness of their class-fellows, will not only enable these to keep pace with them, but be afforded a new means of improvement; for, by teaching what they know, they will know it better. The professor's task being thus lightened, he will be the better enabled to attend to what exclusively devolves on him, and to what may be beneficial to all his pupils in class. His business will chiefly consist, as it ought, in showing them how to think and how to learn, rather than in hearing or teaching them; this is the assistance most required by learners, and most suitable in public instruction.

4. *A good Method is in accordance with Nature.*

The natural process by which the vernacular idiom is acquired demonstrates what can be done by self-instruction, and presents the best model for our imitation in devising a method of learning languages. Without premeditated design on his part to learn, or on that of his parents to teach him the language, a young child unconsciously gains the power of understanding it when spoken. From the moment his perceptive faculties are in full activity, prompted by curiosity, he notices the looks, the tones, the gestures, which accompany the phraseology addressed to him, and, aided by sympathy, he readily apprehends the idea

conveyed by the language of action. Once in possession of the idea, he instinctively associates it with the phraseology, the representative character of which becomes obvious to him by repetition. Thus he gradually masters the import of words, and finally understands the articulate language independently of the natural signs.

As the child, afterwards, wishes to express his particular wants and feelings, he instinctively repeats the expressions he has heard: but mostly modifies them conformably to others which are familiar to him; he adapts to different words, the order, verbal inflections, and grammatical concord, which he has heard used on similar occasions. If, for example, he hears the following phrases: *I like a good child; John will eat the cakes*; he will, according as the case requires, repeat these phrases *verbatim*, or modify them one by the other, and form similar ones which he never heard before; he will alter them somewhat as follows: *I like a good cake; I will eat good cakes; John eats cakes; John will like the cake*, &c. When he repeats the expressions which he has heard, he speaks by *imitation*; when he alters them, he speaks by *analogy*. The one exercises his memory, the other his judgment. Such imitations and analogies, the first manifestations of his dawning reason, permit him always to suit his language to his social wants; analogy, especially, enables him to multiply his expressions in proportion to his increasing stock of ideas. It is from imitation and analogy that custom derives its authority in language.

Curiosity, *sympathy*, and *perception*, are sufficient to enable a young child to understand what is said—*imitation* and *analogy* to enable him to speak. The same result would be obtained in a foreign language, if these various faculties could be made to act a prominent part in the learning of it, but this cannot always be done completely; two of these faculties—sympathy and perception—are more especially suited to the social condition of infancy, and are not generally available in acquiring a foreign language after this period. However, our mental constitution provides for this deficiency, because their place is efficiently supplied by *imagination* and *conception*, which act respectively in the absence of persons and things as sympathy and perception do in their presence. With regard to the other three faculties,—curiosity, imitation, and analogy,—they are active and efficient at every period of life, and ought, consequently, to be resorted to in a rational method.

Although circumstances do not always permit the complete adaptation of the method of nature to the study of a foreign language, the fundamental principles on which it rests should always be kept in view, namely, *example* and *practice*. By these principles the child is easily and successfully led from the ideas to the signs, from the phraseology to the words, from the facts of language to the rules of grammar. By them also he may be led in a foreign, as in the native tongue, from hearing to speaking, and from reading to writing.

The practical process of nature must also be taken as a guide in tracing the path which, through a gradual conquest of difficulties, may lead to the full possession of a language, that is, the power of thinking in it. It cannot be said to be known, unless its expressions directly and instantaneously awake the ideas which they represent, or flow from the lips as the offspring of thought.

The object of language is to associate signs with ideas, expressions with impressions. To know it is to possess the double power of conceiving ideas on hearing or seeing their signs, and reproducing these same signs orally or in writing, on conceiving the corresponding ideas. These two elements of language are alternately cause and effect, and exercise a reciprocal action on each other. Their close association in the mind being indispensable to the complete knowledge of a foreign language, the method should direct the practice towards the accomplishment of this object. The more closely we imitate nature in the acquisition of a foreign language, the more readily shall we think in that language.

5. *A good Method comprises Analysis and Synthesis.*

The complete knowledge of a language consists in the power of using it readily in all its forms and in every way in which it is required. This power depends on example more than on precept, on practice more than on theory. None of these great principles, however, should be neglected; a good method employs them all in turn. As *example* and *practice* present materials for decomposition and classification, so *precept* and *theory* assist in recomposing the elements into their syntactical combinations and in generalising the facts of language. In the study of the arts, decomposition and recomposition, classification and generalisation, are the ground-work of creation.

We call *analysis* the method which rests on *example* and *practice*, and leads by induction to the principles under which the facts of language may be classed; and *synthesis*, the method which makes *precept* and *theory* the starting point from which to arrive, by deduction, at the forms of expression.

Analysis, the method of nature, presents a whole, subdivides it into its parts, and from particulars infers a general truth; synthesis, the method of philosophy, sets out from general truths to reproduce the particulars, and deduces all the consequences which flow from given principles. The analytical method brings the learner in immediate contact with the objects of study; it presents to him models for decomposition and imitation. The synthetical method disregards example and imitation; it turns the attention of the learner to principles and rules, in order to lead him, by an indirect course, to the objects of study.

In the acquisition of a foreign language, translation into the native tongue, the learning of words from the connected discourse—either in hearing or reading,—the study of the foreign writers, the expressing of ideas by analogy with the standard phraseology, and the discovery of grammatical principles by induction from the language, are examples of the analytical process. The learning of words, definitions, and rules of grammar, as an introduction to the study of a foreign language, and the writing of grammatical exercises, are examples of the synthetical process. The former is not only the more direct process of the two, it is also the more expeditious and the more efficient, as is proved by the manner in which nature teaches the vernacular tongue, contrasted with that in which a foreign language is usually taught in schools. The reason of the inefficiency of synthesis is, that a knowledge of principles implying a knowledge of the particulars on which they are founded, principles and all abstract notions are difficult of comprehension and application to him who is unacquainted with those particulars.

By analysis we discover truths; by synthesis we transmit them to others: hence the former is called the method of invention, and the latter the method of doctrine. Analysis, consistently with the generation of ideas and the process of nature, makes the learner pass from the known to the unknown; it leads him, by inductive reasoning, to the object of study, and is both interesting and improving, as it keeps the mind actively engaged. Synthesis, on the contrary, which imposes truths and sets out with abstractions, presents little interest, and few means

of mental activity in the first stages of instruction. But, although it yields to analysis in efficiency, for all practical purposes, it should not be entirely rejected; it is necessary for completing the work commenced by analysis. These two processes are a mutual assistance and proof to each other. In a rational method we should follow the natural course of mental investigation; we should proceed from facts up to principles, and then from principles down to consequences; we should begin with analysis and conclude with synthesis.

6. *A good Method is both Practical and Comparative.*

A good method should not only facilitate the acquisition of knowledge, but should also improve the mental capabilities of the learner. Useful, then, as a second language may be, either to extend his circle of communication, or to multiply his sources of information, it will assume a much greater importance, if its study be made subservient to a more profound knowledge of the native tongue, to the formation of taste, and the cultivation of the intellectual powers.

The benefits derived from a foreign language, considered as a vehicle for receiving and communicating ideas, are consequent on a knowledge of it, and commensurate with the wealth of its literature, with the advancement in science of the nation to which it belongs, and with the number of persons who use it habitually. But the other benefits—improvement in the native tongue and intellectual discipline—which arise from the very exercises by which the foreign language is learned, are only incidental, and depend not so much on the language as on the method pursued in its acquisition.

There are two distinct modes of proceeding in learning a foreign language; the one is the *practical* or *natural* process, the other the *comparative* or *artificial*. The former is the more rapid and the more successful for merely acquiring the use of a language; but the latter, although a slow mode of proceeding, is the only means by which the incidental benefits can be secured.

It is by practice that the language, either spoken or written, may be rendered familiar to learners, and that its materials—the words and phraseology—may be acquired, recollected, and applied. By practice, also, is effected in the mind the immediate association of signs and ideas, which holds an important place in a good

method, as being indispensable to a complete knowledge of a foreign language. But the other acquisitions, which are far more valuable, although only incidental, are obtained by a frequent comparison of the foreign with the native tongue, which arises from the study of the one through the other. The various ways of considering the two languages relatively to each other and the investigations which bear on their respective genius, lead to a succession of analytical and synthetical processes which highly cultivate observation and judgment. The resemblances and differences which exist between the two idioms being thus constantly brought into view by reciprocal translations, elicit in a striking manner the principles which are peculiar to each or common to both; in other words, initiate learners into a knowledge of particular and general grammar.

In transferring into one language the ideas expressed in another, the translation may be either *literal* or *free*—that is, it may follow *verbatim* the words and construction of the original text, or depart from them to conform to the idiom and genius of the language in which it is made. In either case, the translation, to be faithful, should convey the identical ideas of the original. The literal and the free translation perform, each, an equally important part in the comparative study of a second language. The details of the course of instruction ought to show when one is to be preferred to the other, what benefit arises to the learners from translating orally or in writing, as also from rendering the foreign into the native tongue, or *vice versâ*, and how far these different kinds of translation assist in learning the foreign idiom, or improving in the native.

The practical and the comparative methods have each their distinct sphere of action: the former exercises the powers of perception, imitation, and analogy: the latter, those of reflection, conception, comparison, and reasoning; the first leads to the art, the second to the science of language. The practical process requires little mental effort, and leads instinctively to a mastery of a language; the comparative process, on the contrary, by presenting difficulties which unceasingly call the reflective powers into action, inures the learners to self-reliance, self-direction, and intellectual labour, which constitute its chief merit as an instrument of moral and mental discipline. The one teaches how to use a language, the other how to use the higher faculties of the mind. The combination of both would constitute the most efficient system.

Daily experience offers striking illustrations of the incomplete results of these two methods, when pursued separately. Those who have been confined to practice in acquiring their own or a foreign language, have not, by this acquisition, added much to their original stock of mental activity; and, although they may speak either language with great volubility, they are generally deficient in literary discrimination. On the other hand, a considerable number of persons could be found, who, having, in the study of Latin, attended to the analysis of a few classics rather than indulged in extensive reading, or in the practice of the language, could not, in the least, use it as a vehicle of thought, whilst, through its means, their intellectual character has been raised, their taste refined, and their power of native expression improved.

The distinction between the practical and the comparative method shows why the study of a second language is more favourable to mental culture than the acquiring of the native tongue. But the benefits of the comparative method depending, in a great measure, on a practical knowledge of the vernacular, this ought to be made the groundwork of the study of a foreign idiom. A complete course of education should commence with the vernacular, and means should be unfolded for imparting it to young people, and for making it, at the same time, the medium of mental development during the first two periods of youth. Foreign languages, and especially the ancient, will afterwards become the most efficient means by which to improve the powers of oral and written composition in the native tongue.

7. *A good Method is an instrument of mental Culture.*

All the intellectual faculties should assume an equal activity throughout the various exercises which may be recommended for improvement in the native as well as in a foreign language. Any system which neglects this harmonious mental culture, fails in its paramount object. The study of language presents, in this respect, very great facilities; for it embraces thought and its expression: the operations of the mind may be said to be identical with the use of language. The various acquirements which constitute the complete possession of a foreign idiom afford, through the exercises indispensable for their attainment,

the means of cultivating attention and raising the intellectual powers from their original state to the highest degree of improvement. The manifold exercises through which these acquirements are made should be so regulated as to call forth all the energies of the mind. The intellectual discipline generated by a rational method begins with those mysterious lessons by which the child is first taught to associate external signs with sensations and notions, and continues through the whole course of the study, by means of critical explanations, translation, reading of foreign works, and analysis of their style. The gradual disclosure of the thoughts and sentiments of good writers will gratify his curiosity, excite his sympathies, improve his taste, invigorate his conception, enrich his memory, and enlighten his understanding.

The powers of observation, comparison, imitation, analogy, recollection, invention, will be cultivated in learners by oral and written compositions, which will, first, afford them frequent opportunities of comparing their copies with the model, and will, next, throw them upon their own resources in the expression of ideas; imagination will be exercised by their attention being directed to imaginative and poetical productions, which will carry their thoughts beyond the time, place, and objects of ordinary life; and the reasoning powers will be unfolded by comparing, generalising, and classifying the facts of language, by inferring and applying the rules of grammar, as also by discriminating between different sentiments, different styles, different writers, and different languages; whilst the active co-operation of attention and memory will be involved in the action of all the other faculties.

To assist the mind still further in its operations, a system of examination should be introduced, which will require students to enter into an enumeration of particulars, to give a summary of the prelections made by the professor on various departments of grammar, philology, and criticism, and, finally, to bring their mental energy to bear on those rapid processes of thinking, speaking, and writing, so indispensable in the active scenes of civilised life.

The study of living languages, judiciously carried on, will prove particularly useful to females, who, being denied the privilege of a scientific education, may, by this pursuit, be afforded the means of complete mental discipline. Madame de Staël, who herself possessed high mental powers, speaking from her own experience, says, "The study of languages, which, in

Germany, constitutes the basis of education, is much more favourable to the progress of the faculties in childhood than that of mathematics or of the physical sciences." *

The second part of Madame de Staël's assertion is perhaps liable to objection: the physical sciences seem to us better calculated than languages for exercising the minds of children under twelve, and have, consequently, in the preceding pages, been recommended as a branch of elementary instruction; we will, in Book IV., consider this subject more fully. But to the first part of her assertion we fully assent: we consider the study of language as something more than a dry study of words, than a mere matter of colloquial convenience. It has already been shown that mathematics yields to languages in efficiency and usefulness, as an instrument of intellectual discipline. We will only add, that the pleasure of surmounting the difficulties of a foreign work, and of clearly conceiving the elevated thoughts of an eminent writer is, at least, as lively and refined as that of ascertaining mathematical truths; whilst the acquisition of a language affords, in general, more satisfaction, by reason of the immediate application which can be made of it, either to receive or to communicate ideas.

Every intellectual pursuit in early life ought to have for its principal object to invigorate the faculties, and to produce, by means of appropriate exercises, the highest degree of activity of which the mind is capable. All persons have not equal need of the different branches of instruction taught in schools, and they may differ in opinion as to their degree of utility; but all will agree that habits of reflection, investigation, and reasoning, are useful to every individual, and at every period of life. The classical and scientific information collected in youth is not unfrequently laid aside in maturity, to make room for the practical business of active life, with which it often has no connection; but high mental capacity is never lost and is always productive of real benefit.

A method which would exclusively rest on the action of a single faculty, whatever might be its apparent success, would be most prejudicial to the intellect. Even imagination, which is often checked in young people, ought to have its due share of exercise: it performs an active part in learning and applying language. All the fine arts, among which may be placed the art of expressing thought, owe their best productions to the

* *De l'Allemagne.*

richness and vigour of that faculty. However, if any be entitled to more exercise than others, these are *attention* and *judgment*—attention, above all, that manifester of the will, that eye of the mind, without which the other faculties would remain dormant. The powerful influence which attention and judgment have in all the affairs of life demands that they should act a prominent part in the process of education. They are the guides which direct us in the use of the other faculties and render their action efficient.

Memory, although holding also an important place relatively to the acquisition of knowledge, demands less specific exercise than the other intellectual powers, because the use of it is necessarily involved in their action. Besides, it has abundant employment during the first periods of youth, in storing up the facts impressed through the senses upon the mind and retaining the corresponding native words. As it predominates in childhood, teachers are apt to resort to it as a general instrument of instruction; but its exclusive cultivation only tends to make learned fools.

This faculty, it is true, early manifests itself, but it never exists alone: the others begin their action much sooner than persons generally imagine. Children are capable of attention and reflection; they have imagination and judgment; they observe, they invent, they reason, as actively as adults, with this difference, that their sphere of mental activity is confined to matters of comparatively little importance. Their intellectual constitution differs from ours only in degree. If we wish to exercise and improve it, we must offer to their consideration objects suited to the weakness of their minds, the use and purport of which they can understand, and which may be congenial to their tastes and feelings.

Memory, however, assumes a most active part in the learning of a language; but a great deal of care is required to render it truly effective. As the power of remembering greatly depends on associations, those should be preferred which link the objects of study more closely, and enable them to recall each other more readily. Mechanical memory should, on no occasion, usurp the place of intellectual memory. It is by exercising the judgment on things and their relations, that language is best secured; the signs will be easily remembered, when the mind is stored with the ideas which they signify. Words, being valueless, and not easily retained apart from the ideas which they represent, should

never be acquired separately from them ; they should be learned on the principle of the necessary association which exists between ideas in a connected discourse, rather than on that of accidental association, as is commonly practised in learning lists of detached words. Nor can they be available for any practical purpose, unless they have been frequently and diversely combined by analogy in the expression of thought.

But it is not enough for a learner to confide information to memory, or to attain skill in any performance ; the possession of an art, to be long retained and be made available for practical purposes, must become, by the repetition of the mental operations requisite for acquiring it, or by reiterated application of its principles, a fixed habit of the mind, or of the muscles. A language will be the more available and the longer remembered as the knowledge of it is more completely secured by confirmed habit in the use of it in its different departments.

SECT. III.—GENERAL PRINCIPLES ON WHICH A RATIONAL METHOD IS BASED.

Although no method can be pointed out for the acquisition of any branch of knowledge, which would suit every individual and every circumstance, there are, nevertheless, general laws, deduced from the functions of the human mind and from the nature of the knowledge to be acquired, which can be made to bear on the study. The brief summary which we have just given of the characteristic features of the method we advocate for learning foreign languages, presents the application to this department of instruction of the great principles laid down in our introductory Book. The practical details of the course founded on them may, to a certain extent, be familiar to experienced and skilful professors ; but they have as yet been confided only to tradition. We will, in the course of this work, endeavour to unfold them, so as to show their application in particular cases, and it is to be hoped that a due observance of them will guard against gross error. None of the great principles which constitute the fundamental laws of a rational method have, we hope, been neglected ; and here we shall recapitulate those which may be called the axiomatic truths of methodology :—

1. The method of nature is the archetype of all methods, and especially of the method of learning languages.

2. The classification of the objects of study should mark out to teacher and learner their respective spheres of action.

3. The ultimate objects of the study should always be kept in view, that the end be not forgotten in pursuit of the means.

4. The means ought to be consistent with the end.

5. Example and practice are more efficient than precept and theory.

6. Only one thing should be taught at one time ; and an accumulation of difficulties should be avoided, especially in the beginning of the study.

7. Instruction should proceed from the known to the unknown, from the simple to the complex, from concrete to abstract notions, from analysis to synthesis.

8. The mind should be impressed with the idea before it takes cognizance of the sign that represents it.

9. The development of the intellectual powers is more important than the acquisition of knowledge : each should be made auxiliary to the other.

10. All the faculties should be equally exercised, and exercised in a way consistent with the exigencies of active life.

11. The protracted exercise of the faculties is injurious : a change of occupation renews the energy of their action.

12. No exercise should be so difficult as to discourage exertion, nor so easy as to render it unnecessary : attention is secured by making study interesting.

13. First impressions and early habits are the most important, because they are the most enduring.

14. What the learner discovers by mental exertion is better known than what is told him.

15. Learners should not do with their instructor what they can do by themselves, that they may have time to do with him what they cannot do by themselves.

16. The monitorial principle multiplies the benefits of public instruction. By teaching we learn.

17. The more concentrated is the professor's teaching, the more comprehensive and efficient his instruction.

18. In a class the time must be so employed that no learner shall be idle, and the business so contrived that learners of different degrees of advancement shall derive equal advantage from the instructor.

19. Repetition must mature into a habit what the learner wishes to remember.

20. Young persons should be taught only what they are capable of clearly understanding, and what may be useful to them in after life.

These axiomatic truths are at the foundation of every rational system of instruction: their application cannot fail to secure the acquisition of knowledge, and of languages in particular. They constitute, as already stated, the common principles into which may be resolved nearly all the suggestions made in the following pages; an intimate familiarity with them is, therefore, indispensable for the full and clear comprehension of our method, the more particularly as, to avoid repetition, we will dispense with referring to them. (11.)

BOOK IV.

NATIVE TONGUE.

"First follow Nature, and your judgment frame
By her just standard."—A. POPE.*

"As the ancient and modern languages cannot, consistently with reason and propriety, be taught before our native tongue, our first step must be to make ourselves masters of the language of the country in which we live."—SIR W. JONES.†

"The intimations of sense give the primary incentive to all the faculties, and furnish one very important element in our experience."—J. D. MORELL.‡

CHAPTER I.

PRESCRIPTION OF NATURE RESPECTING EARLY INSTRUCTION.

SECT. I.—OF EARLY MENTAL CULTURE.

THE universal admission that success in life and personal consideration depend on intellectual development and extensive knowledge, have led many, in their ignorance of physiological principles, to force mental labour on young children. But, in most cases, both the minds and bodies of the little sufferers have been enfeebled by an over-exertion of the brain, when as yet imperfectly formed. There is nothing more painful to witness than the unnatural disproportion which mental precocity introduces between physical and intellectual life. Parents and teachers have much to answer for, who, regardless of the manifest designs of nature, condemn young children to sedentary occupations, and force intellectual acquirements upon

* *Essay on Criticism.* † *Plan of an Essay on Education.*
‡ *Historical and Critical Views of the Speculative Philosophy of Europe.*

their tender minds, at the risk of unduly exciting the nervous system, injuring the brain, and undermining the constitution. So close is the immediate connection between mind and body, that the former cannot be over-exerted without the latter feeling the baneful effects of the undue excitement.

The most eminent physicians of ancient and modern times proclaim the fatal influence which overstraining the mind of youth has on the health and bodily frame. Of the numerous medical authorities which we could bring forward on this point, we will confine ourselves to one, that of the celebrated Tissot, who says, "Long continued application in childhood destroys life. I have seen young children of great mental activity who manifested a passion for learning far above their age, and I foresaw with grief the fate which awaited them; they commenced their career as prodigies, and ended by becoming idiots, or persons of very weak minds..... No custom is more improper or cruel than that of some parents who require of their children much intellectual labour and great progress in their study. It is the tomb of their talent and their health."* Of those who have survived the direful effects of a premature and exclusive excitement of the mind, few indeed have ever risen to eminence.

The histories of the nations among which classical literature and the sciences have been much cultivated, and which have consequently afforded parents opportunities or inducements to force abstract studies upon their children, abound in facts which prove the truth of these observations. Intellectual precocity is but too frequently attended by premature death or debility through life. The instances are very rare of young geniuses having arrived at old age; whilst, on the contrary, many of those whose education began comparatively late, have remained engaged to the end of a long life in the most intensely intellectual labour.

"Experience," says Dr. Spurzheim, "demonstrates, that of any number of children of equal intellectual power, those who receive no particular care in childhood and who do not learn to read and write until the constitution begins to be consolidated, but who enjoy the benefit of a good physical education, very soon surpass, in their studies, those who commence earlier and read numerous books when very young. The mind ought never to be cultivated at the expense of the body; and physical

* *De la Santé des Gens de Lettres.*

education ought to precede that of the intellect, and then proceed simultaneously with it, without cultivating one faculty to the neglect of others; for health is the base, and instruction the ornament of education."*

Let parents then check, rather than excite in their children, this early disposition to mental activity, or, rather, let them counterbalance it by a due proportion of physical and gymnastic exercises: for it is not so much the intensity as the continuity of the mental action, which is injurious to the constitution. Let them not cause the age of cheerfulness to be spent in the midst of tears and in slavery; let them not change the sunny days of childhood into a melancholy gloom, which can, at best, only be a source of misery and bitter recollection in maturer years.

Physical exercises and the cultivation of the perceptive faculties should, with the reading of moral and instructive books in the national language, form the principal occupations of children. Their expanding frame requires the invigorating stimulus of fresh air; their awakening organs seek for external objects of sense; their dawning intellect incessantly calls for the action of their observant powers. This is the great law of nature. She has given to the child that restless activity, that buoyancy of animal spirits, that prying inquisitiveness, which makes him delight in constant motion and in the observation of new objects. If these wise intentions of Providence be not frustrated; if he be allowed to give himself up to the sportive feelings of his age, he will acquire a healthy constitution and a physical and perceptive development, which are the best preparation for mental labour.

Of the men who have conferred benefit on society and have been the admiration of the world, the greater number are those who, from various causes, have, in early life, been kept from school or from serious study. They have, by energetic and well-directed efforts, at a period when the brain was ready for the task, acquired knowledge, and displayed abilities which have raised them to the highest eminence in the different walks of life, in literature, the arts and sciences, in the army, the senate, the church, and even on the throne. The history of the most distinguished among those who have received an early classical education, sufficiently proves that it is not to their scholastic instruction, but to self-education after the period of school, that they chiefly owed their superiority.

* *View of the Elementary Principles of Education.*

David, the sublime author of the Psalms, followed in his early occupations the dictates of nature; he had, in his youth, muscular power to tear asunder the mouth of a lion, to resist the grasp of a bear, and to impart to a pebble velocity sufficient to slay a giant. Napoleon, when in the school of Brienne, was noted in the quarterly reports of that institution as enjoying *good health*; no mention was ever made of his possessing any mental superiority; but, in physical exercises, he was always foremost. Sir Isaac Newton, according to his own statement, was inattentive, and ranked very low in the school, which he had not entered until after the age of twelve. The mother of Sheridan long regarded him as the dullest of her children. Adam Clarke was called a "grievous dunce" by his first teacher; and young Liebig a "booby" by his employer. Shakspeare, Molière, Gibbon, Niebuhr, Byron, Humphry Davy, Porson, and many others, were, in like manner, undistinguished for early application to study, and, for the most part, indulged in those wholesome bodily exercises and that freedom of mind, which contributed so much to their future excellence.

Among innumerable other instances, we will only adduce one more; it is that of Walter Scott, who acknowledges himself, that, in his youth, he made a brighter figure in the "yards" than in the "class." His early life is thus vividly described by Miss Martineau:—"Here is a boy lying about in the fields, when he should have been at his Latin grammar; reading novels, when he should have been entering college; spearing salmon, instead of embellishing a peroration. Yet, this personage came out of this wild kind of discipline, graced with the rarest combination of qualifications for enjoying existence, achieving fame, and blessing society. Deeply learned, though neither the languages nor the philosophy of the schools made part of his acquisitions; robust as a ploughman; able to walk like a pedlar; industrious as a handicraftsman; intrepid as the bravest hero of his own immortal works. Here is enough to put one on inquiring, not whether learning and even school discipline be good things; but whether the knowledge usually thought most essential, the school discipline, which is commonly esteemed indispensable, be in fact either the one or the other."*

* *Genius of Walter Scott.*

SECT. II.—CLASSICAL STUDIES UNSUITED TO CHILDHOOD. —AGE AT WHICH THEY MAY BE COMMENCED.

Curiosity, sympathy, perception and association, imitation, analogy, and memory, are, as we have seen, the instruments which, with the aid of the language of action, nature employs in enabling a young child to enter into communion with his fellow-creatures. These instruments may also be applied to the learning of a foreign language in circumstances similar to those in which the native tongue is acquired; but, when the learner is differently circumstanced, the natural process not being strictly practicable, the comparative must be had recourse to; and the study of that language is, thereby, placed beyond the reach of childhood. The powers of imitation, analogy, and memory, although very active during the whole period of youth, are, nevertheless, inadequate for acquiring all the departments of one language through the written form of another. It is only when the learner can turn his serious attention to particular objects of study, when he can command his powers of comparison, reflection, abstraction, and judgment; when he is able to perform the various exercises required by the method or imposed by the professor, when the maturity of his mind enables him to understand the authors which may be put into his hands; and when he comprehends the native expressions so completely that they interpret to him their equivalents in the foreign language; it is, we say, only then he can learn that language through his own, or derive any benefit from the periodical lessons of a professor.

The learner, on entering upon his scholastic studies, is, with regard to a second language, in a position widely different from that of the infant who acquires the native idiom instinctively and even unconsciously. One language having already assumed in his mind the exclusive right of representing ideas, its words and idioms come unbidden, and stand in the way of foreign expressions; he has need of firm determination and of well-directed mental effort to carry him successfully through the study. It is erroneous to imagine, as many persons do, that, because children acquire their own language with perfect ease, or because they are endowed with great retentive powers, they have an aptitude for learning languages, and that, consequently, such a study is the fittest for them. We cannot, in passing, refrain from expressing our astonishment that a man like

M. Thiers* should have fallen into this error—an error which arises from a confusion of the *natural* or *practical* with the *artificial* or *comparative* process. The practical method, by which the young child acquires the vernacular tongue, demands, as was seen in the preceding Book, Chap. iii., scarcely any mental exertion beyond that of perception, analogy, association, and memory; the comparative, on the contrary, calls for the co-operation of intellectual energies far above the power of childhood.

In the first two periods of youth, a child, incapable as yet of exclusively directing his mental faculties towards one object, is constantly diverted from the studies imposed on him by what is going on around. Under the influence of the new and pleasurable impressions which he receives from the external world, his thoughts are instinctively turned to it and rapidly directed from one object to another; his powers of reflection, conception, and abstraction are weak; his sensitive faculties predominate over his reason. Not learning, from a consciousness of the importance of the pursuit, but merely to please others, or to avoid punishment, he cannot feel much interest in it, and only pants for the moment when, released from restraint, he may freely give himself up to the sports of his age, to the physical activity and buoyant feelings with which nature has so powerfully gifted him. Whereas, after the first two periods, and, still more, after the third, a youth, capable of commanding his attention, has, in the study of books, and in all intellectual pursuits, considerable advantage over a child under eight or ten. Stimulated by a desire for information, and assisted by experience and previous knowledge, he is in a position to overcome difficulties. Capable of appreciating the mental enjoyment and moral benefit arising from such pursuits, he seeks only to improve himself and extend his sphere of knowledge. Impelled as he is by laudable ambition and self-interest—two powerful incentives—the overcoming of obstacles and the solution of perplexing truths delight him and excite him to new efforts.

The child whose tender mind is easily affected by the sympathies and perceptions of the moment, will, it is true, often retain impressions better than an adult; because, entirely under the influence of the sensations which caused them, he yields and attends to them, especially if they are associated with agreeable

* "Childhood is the period most suitable for the study of languages, because the mind, as yet inadequate to exercises of reflection, is fully capable of those of memory."—*Rapport sur l'Instruction Secondaire*, 1844.

feelings; but he retains with difficulty the ideas which are communicated to him through written signs addressed to the reflective and conceptive powers. The abstractions of book-lessons are, in fact, unsuited to childhood. The studies which demand continued application of the mind should be postponed until the vigour of the constitution and the natural development of the brain and of the intellectual powers are equal to the task. Every period of life has its particular duties and occupations which prepare for the next. We must not anticipate the march of time, and expect from one period what belongs to another.

The study of a foreign language by the comparative method cannot, with ordinary children, be profitably entered upon until the age of twelve or thirteen. Before that period, the immaturity of their intellect, the want of a motive for study, and the indisposition to sedentary occupations, cause the instructor to spend more time in ascertaining whether they have prepared their lessons, or whether they really understand them, than in imparting to them any positive information.

It cannot even be said, in favour of the early study of a foreign idiom, that it makes a deeper impression on the mind: ninety-nine out of a hundred of those who commence Latin before the age of twelve, have but a faint recollection of it a few years after they leave school. It is a common fact, that young children forget languages, even their own, very rapidly: if a child six or seven years old be taken to a foreign country and mix exclusively with children natives of that country, he will, in one year, speak their language like themselves, and have nearly forgotten his own.

When children begin Latin at eight or nine, several years must be consumed in preparatory labours, before they can attempt the translation of the classics. If they are not allowed by the impatience of parents or teachers to postpone this exercise to a more advanced and more favourable age, they meet with a great impediment to the prosecution of their task. Unable to study by themselves, they must have every part of their author explained and translated to them; and as the time which, in school, the professor can devote to this department of classical studies and to the individual instruction of his pupils, is generally very limited, the learners can make but slow progress through their book.

The incomplete knowledge which a young child possesses of his own language is, as well as the immaturity of his intellect,

an impediment to his understanding foreign authors, and, consequently, a cause of delay and vexation in the prosecution of his study. The teacher must find it difficult to make him render the profound thoughts and masterly style of the ancient writers, when he has, as yet, conceived only the simplest ideas, and has at his command only the most familiar expressions. If left to himself, he cannot discriminate between correct and incorrect forms of expression in his own language, and he acquires, by his barbarous translation from the Latin, the most defective habits of speaking. An extensive knowledge of the native words and their various import is required to explain the foreign authors; and this knowledge is gained, not from the nursery prattle, but from a long intercourse with the well-educated, and from a diligent reading of the national standard writers. The young learner may, it is true, with the help of his dictionary, translate every word of his author; but he will not be the less ignorant of his meaning, because a dictionary in two languages only gives the corresponding words without defining them, or illustrating their signification; so that he only substitutes one unknown word for another. Thus, at an early age, many native words come, in translation, under his notice before he has a just conception of their precise meaning; so that they precede in his mind the ideas which they represent—a practice which ought to be carefully avoided, as it accustoms him to take sound for sense, and, as often happens, is calculated to make him, for the rest of his life, an empty talker and a false reasoner. But, should he even understand every word he uses, this exercise is not the end proposed by classical instruction; it is to desecrate and degrade the ancient writers to subject them to literal translation, and make their noblest passages mere parsing lessons. They claim a higher office: the scope of their works, the wisdom of their views, and the beauties of their diction, should be not only investigated and appreciated, but imitated in our modern idioms. Such tasks are far beyond the capacity of childhood. Adults alone can study with profit those master-pieces of poetry, oratory, history, philosophy, and politics.

Children who commence Latin early, are not unfrequently put into Virgil or Ovid at eleven or twelve, and into Horace or Livy at twelve or thirteen: how can they, at those ages, comprehend and relish works which, to be properly understood, demand all the mental vigour of manhood and a previous acquaintance with ancient history, geography, and mythology? How can they

render thoughts which, to be adequately interpreted, demand a highly improved language and powers of expression which very few persons possess? It is impossible that they could conceive, even with the assistance of their teachers, the elevation of sentiment, the grandeur of thought, the boldness of imagery, and the grace of expression with which they are replete. How can they derive profit or pleasure from the reading of Horace or Virgil, or even from modern compositions, such as those of Racine or Voltaire, Dante or Petrarch, Goethe or Schiller, when their ears are not yet attuned to the harmony and rhythm of verse, when they have yet neither felt in themselves, nor witnessed in others the passions of the human heart, which these authors delineate? What interest can young children take in highly imaginative compositions in foreign languages, when they are quite incapable of comprehending works of the same standing in their own? Are the works of Milton and Shakspeare fit for English children? To impose such reading upon them is, indeed, to give them the habit of being satisfied with words without ideas!

The important lessons to be learned and the intellectual enjoyments to be derived from ancient literature, are lost to the mature man by the childish conceptions which he associated with the classics at school, and by the unpleasant recollection of all the misery attendant on the study. "The flowers of classic genius with which the teacher's solitary fancy is most gratified," says Walter Scott, "have been rendered degraded in his imagination by their connection with tears, with errors, and with punishments; so that the Eclogues of Virgil and Odes of Horace are each inseparably allied in association with the sullen figure and monotonous recitation of some blubbering schoolboy." * Such are the pernicious consequences of a premature study of the classics, that Lord Byron, whose mind was so well fitted to enjoy the beauties of Horace, had he read it at the proper time, complains in poetical and bitter strains of the unconquerable dislike with which the scholastic system inspired him for this poet.†

Lamartine makes an observation of the same tendency in his "Pilgrimage to the Holy Land." "Each wave," he says, "brings me nearer to Greece. I touch its soil; its appearance affects me profoundly, much less, however, than it could have done, if all these recollections were not accompanied by the consciousness that instruction was forced on me to satiety and disgust before

* *Old Mortality. Pref.* † *Childe Harold.*

I could comprehend it. Greece is to me like a book of which the beauties are tarnished, because I was compelled to read it before I could understand it. . . . . I prefer a tree, a spring under the rock, an oleander on the banks of a river, or the fallen arch of a bridge covered with convolvulus, to the monuments of one of these classic kingdoms, which recall nothing to my mind but the ennui they gave me in my childhood."* This painful truth, so candidly confessed and so beautifully expressed by these eminent writers, will be readily assented to, from personal experience, by the great majority of those who have received a classical education.

If the study of classical literature was deferred until the mind was capable of comprehending the objects which it contemplates, and until an extensive knowledge of the national idiom enabled the learner to explain and translate the ancient authors, considerably less time, we repeat it, would be needed, and the learning of the dead languages would not only be effected with more certainty and less trouble, but would prove in every way more beneficial. The students, being also better able to distinguish truth from error, would have less chance of being injured by the false and unchristian morality of some of the ancient writers.

From these observations it is obvious that the study of a second language through the medium of books is not suited to a child under twelve: it ought to be commenced between the ages of twelve and sixteen, when the learner can feel the value of knowledge, when he is capable of self-direction, when his understanding is ripe for serious studies, and when also his time is not yet engrossed by a course of scientific studies, or by professional education.

Young people should not be allowed to enter upon the study of the ancient languages, until they are of an age to benefit by it; and, as a substitute for that study, they should go through a course of practical instruction which may gradually unfold their intellectual powers, and make them masters of the instrument—the vernacular tongue—by which the second language is to be attained. This preparatory course is the one which, under the name of Primary Instruction, we recommended as suitable to the first two periods of youth (see Book I., c. iii., s. vi.) The Germans were the first to bring about a reform in this respect. Their youth now generally enter upon their classical studies at a later

* *Voyage en Orient.*

period than ours ; and they prepare for them by a serious study of their own language. To this judicious mode of proceeding, and to the close attention which, among them, is usually paid to early education, may be chiefly ascribed their acknowledged superiority, both as scholars and as practical philosophers. (12.)

SECT. III.—THE KNOWLEDGE OF THINGS—AN INTRODUCTION TO THE KNOWLEDGE OF WORDS.

The usefulness of a language is always in proportion to the soundness of the judgment, to the number of ideas treasured up, and to the correct apprehension of the meaning of words. "When," says Johnson, "the nature of things is unknown, or the notions unsettled and indefinite, and various in various minds, the words by which such notions are conveyed, or such things denoted, will be ambiguous and perplexed." * One great cause of errors amongst men proceeds from words, the sense of which has not been sufficiently determined.

In order that a clear and just idea be awakened in the mind, on hearing or seeing the sign which represents it, we must necessarily have had the consciousness of that idea previously. A person born blind would for ever hear colours spoken of, and one born deaf for ever see written representations of sounds, without either of them conceiving respectively what colours or sounds are. Sensations and their consequent ideas at first present themselves intuitively to the mind of a young child, that is, divested of the words which designate them ; when he afterwards hears the words used as symbols of these ideas, he is enabled both to understand them and to employ them, in his turn, either in speaking, or in carrying on silently a train of thought. The fact that, in all languages, the words which stand for immaterial things are borrowed from those which fall under the perceptive action, sufficiently proves that our ideas originate in our senses. It is, therefore, of great importance that a child should acquire clear notions of things, as a preparation for a knowledge of words and for accurate reasoning.

This will be effected by a judicious exercise of the perceptive powers. It is through them that our first notions are impressed on the mind, and that words acquire any value ; for these are signs of ideas to him only who is acquainted with the things they

* *Preface to Dictionary*

represent. Words should not be taught apart from the ideas signified; they are inseparable from them, as is the shadow from the substance; and they stand in the same relation in point of importance. "Words are the daughters of Earth; things are the sons of Heaven." *

The varied use of language will be elicited and impressed on the mind of a young child, if he be made to examine and compare the objects of perception, and to express his judgment about them; and if his first acquaintance with words be accurately associated with the corresponding notions of things, he will acquire habits of perspicuity, and will, afterwards, be less liable to err in receiving or communicating ideas. His physical and intellectual faculties should then be exercised in and out of doors upon the external and material world, instead of being confined to abstract subjects, within the precincts of a school-room, where his intellect is enfeebled by unrelaxed mental labour, and his body by a close imprisonment of five or six hours a day. Let us not put into his hands alphabets, spelling-books, or rudiments, which do not, in the least, improve his understanding; but let us teach him to read the book of nature which lies before him; let us make him spell its wonders. Let the world be his school-room, experience his teacher, curiosity his stimulus; and wisdom will be his reward.

The study of things satisfies the natural curiosity of childhood better than the study of words; and God has liberally scattered on every side objects of sense, from which the child can derive pleasure before the higher powers of the understanding are capable of affording him any enjoyment. This sufficiently indicates how to proceed in intellectual education. The young intellect should, through pleasing sensations, be gradually led from the perception of familiar objects to the examination of the phenomena of the physical world, and be familiarised with the most striking laws of nature, exclusively of mathematical demonstration or scientific nomenclature. These phenomena and these laws would present more interest and be better remembered than dry words; they would call into activity the powers of observation, comparison, discrimination, and generalisation, more effectually than can be done, at an early period of life, by the learning of a language; for it must not be forgotten that the practical process, which, for its attainment, is alone suitable to young children, does not exercise any of these powers.

* Dr. Johnson, *Preface to Dictionary*.

The elements of physical science, which comprehends within its boundless range the vast domains of the material universe, may be understood earlier in life than the first principles of language; and there can be no doubt that a child would learn them with more ease and profit than the rules of composition: they can be defined with more precision and exactness than those of taste in literary productions; and we venture to say that the harmony of the universe would sooner be comprehended than the harmony of style, or the sublimity of thought, of the ancient classics. To the generality of young people under twelve, natural history, and natural philosophy, with all its experiments, would afford greater pleasure than could be derived from vocabularies, declensions, and conjugations, from parsing, translating, and writing the languages of Rome and Greece, or settling the exact meaning of passages, which often contain but commonplace observations, such, in fact, as are mostly to be found in the elementary books which may be put in the hands of classical learners at so early an age.

But what renders physical studies most suitable to childhood, is their moral and religious tendency. "In a moral point of view," says Lord Kames, "the study of nature claims the attention of the young: it contributes to the knowledge of God. 'It gives a relish,' as Mr. Boyle observed, 'for abstract truths, which do not gratify ambition, sensuality, or low interests.' The laws of nature suppose a lawgiver. The properties of body, subjected to the power, and ingenuity, and use of man, lead to the Author of these properties and of this subjection." *

The physical senses and perceptive powers, which take cognisance of the properties and relations of things, being in full activity before the higher mental faculties, which deal in abstraction, it follows that a disposition for the experimental knowledge which rests on these properties or relations, is earlier manifested than for other branches of instruction. This fact is in accordance with the law of the mind which places inductive before deductive reasoning, and with the true method of philosophising, which is this: "From real facts, ascertained by observations and experiments, to collect, by just induction, the laws of nature, and to apply the laws so discovered to account for the phenomena of nature." †

The senses are the instruments with which experiments are

* *On the Culture of the Heart.* † Thomas Reid *on the Powers of the Human Mind.*

tried and discoveries are made: their testimony is that on which we place the most confidence for the acquisition of correct notions. These are new motives for exercising them much and enlarging their sphere of action. Their development greatly assists that of the understanding: the accuracy of perception arising from the sensation begets accurate conception; and the practice of observation leads to reflection and comparison; hence it is that the exercise of perception and observation lays the foundation of sound judgment.

The cultivation of the physical senses may be the more effectively promoted, and a habit of attention the sooner formed, as children are not easily fatigued so long as their perceptive powers are engaged and their curiosity is gratified. A habit of attention, so favourable to the acquisition of knowledge, cannot be commenced too early: when once acquired the learner will want but little teaching to aid and regulate his spontaneous efforts.

Our prescriptions are in accordance with those of nature. A child, though left to himself, is neither idle nor listless; he is, on the contrary, even from the most tender age, active, enterprising, and inquisitive; he delights in observing and comparing things, and he is most ardent in the pursuit of knowledge. The information he acquires from every object which he submits to the action of his senses, from every person with whom he converses, from every incident of social life which he witnesses, is incomparably more useful to him in after-life, and better adapted for the improvement of his mind, than the repetition of book-lessons, which, when early imposed, seldom reach the understanding. Such is the wise course of nature; such is the process of instruction which is based on our organisation.

It is really surprising to think of the mass of information accumulated by the mind's natural impulse in the first stages of life. "There is," says Dr. Thomas Brown, "an education of man continually going forward in the whole system of things around him; and what is commonly termed education is nothing more than the art of skilfully guiding this natural progress, so as to form the intellectual and moral combinations, in which wisdom and virtue consist."* In order to fulfil the manifest intentions of Providence in this respect, parents have only to direct the natural powers of their children from the earliest infancy; they

* *Philosophy of the Mind.*

need only give scope to those instinctive efforts of self-learning as they are prompted by curiosity or necessity. Self direction is obviously the natural state of man. This is particularly the case with language; it is not taught to him; he learns it of himself. The vital principle in the pursuit is to enable the pupil rightly to instruct himself. The art of education essentially consists in continuing and completing the work of nature. If we only second her and regulate her progress, if we indulge and direct the inexhaustible curiosity of children, we shall provide for their first wants of instruction, in a manner which is both pleasing to them, and congenial to their sensitive activity.

Nature, by prescribing physical development and the exercise of the perceptive faculties as the fittest for childhood, suggests the process through which the native tongue ought to be acquired, and the intellectual education carried on, until book instruction begins. We must not be in haste to erect the edifice of knowledge: the great object of early education is not so much to give a certain amount of learning, as the power of acquiring it afterwards. "The aim of education," says Dr. Beattie, who on this point follows the idea of J. J. Rousseau, "should be to teach us rather *how* to think than *what* to think; rather to improve our minds, so as to enable us to think for ourselves, than to load the memory with the thoughts of other men."* Let us lay a solid foundation, by turning the attention of children upon the things for which the words stand; and, in thus preparing the way for the perfect comprehension of the native idiom, we shall create in them a taste for literary and scientific pursuits.

SECT. IV.—CONVERSATION—THE BEST MEANS OF INSTRUCTION IN THE FIRST PERIODS OF YOUTH.

The most effectual lessons for young children are generally those which have no appearance of premeditation or formality—a mode of instruction found in conversation alone. The synthetical arrangement usually adopted in didactic books is not well suited to their inexperience. Their curiosity must be awakened by the exhibition or the statement of facts, before they can be profitably taught the principles of science. By speaking

* *Essay on the Utility of Classical Learning.*

familiarly with them about the productions of nature and art, about every object within their sphere of examination, we shall give them habits of attention and observation; we shall cultivate in them a taste for useful and laudable pursuits, and gradually render them capable of self-direction; we shall finally teach them their own language: for the frequent use thus made of its elements and phraseology, and of technical expressions in the presence of the very things which they signify, will enable children to comprehend rightly all they hear and read, and will also considerably increase their command of expression, by the frequent opportunities which will be afforded to them of applying the two great principles of imitation and analogy. The development of the mind and of the faculty of language in a child depends, in great measure, on the warmth of sympathies and extent of knowledge of those with whom he associates habitually.

Although the true spirit of conversation requires its subjects to arise from circumstances and apparently without any fixed order, yet, to secure and complete the advantages expected from it, the topics should not be left altogether to chance: the different branches of instruction intended to be conveyed should be introduced gradually and in mutual harmony; they should be such as may suit the age and develop all the faculties of young persons.

With a view to attain these ends, a progressive series of suggestions and ideas, embracing all the elements of knowledge which may serve as a ground-work for rational conversations, or for exercises in observation and reflection, will be offered in the following chapter. Association of ideas will come in aid of these general suggestions to multiply indefinitely the information which will thus be imparted to young people. And when, by incidental digression, the topics become uninteresting or uninstructive, a skilful teacher will always know how to bring attention back to the particular subjects with which he proposes to familiarise his pupils.

The diversity of objects which these conversations will bring under the consideration of children will admirably favour their love of novelty. It will delight them, at the same time that it expands their minds and increases their vocabulary. We must speak to them of every thing, if we wish to familiarise them with every expression. Acquiring new ideas will lead to the mode of expressing them, as using new words will lead to an

inquiry into their meaning; thus the acquisition of knowledge and of language will assist each other; thought and speech grow together.

The principle of Jacotot, "*tout est en tout*," (every thing is in all things), will find its application in such lessons; for, in conversing on any matter, one idea brings out another, and an endless succession of subjects and modes of speech are unfolded and offered to the attention. Thus will be gained the general instruction which is required by the first two periods of youth. Conversation, properly directed, will be to children an inexhaustible source of information; it will remove from their minds erroneous or confused notions, will bring their intellectual powers into action, will impel them to seek for new ideas, to use sound arguments, and clothe them in appropriate language.

Moral culture also can be promoted; for, in this friendly intercourse and interchange of thought, the social affections are no less actively engaged than the powers of the understanding; precepts of morality and religious truths may be inculcated as easily as the elements of science. Every thing, in fact, comes within the province of the practical course which we recommend. Language has expressions for all thoughts and for all sentiments. Its acquisition embraces the investigation of duties, virtues, and inclinations, as well as of knowledge; it should, therefore, be made subservient to forming the hearts, as well as unfolding and enriching the minds of children. It is thus that their religious, moral, and intellectual development will keep pace with their progress in the vernacular tongue.

Conversation is something more than an agreeable pastime; it is a very active agent in circulating opinions and information, in forming the taste and character. That the young inmates of public schools are usually destitute of general knowledge and awkward in society arises from their being long denied the advantages of social converse with well-informed persons, such as are often brought together in respectable families. Conversational teaching has been considered, at all times, and by all eminent educationists, as the most effective process of early education. It was so essentially the method of Socrates, that it is now known under his name; the educational system of J. J. Rousseau is but a continued conversation between the pupil and tutor. Miss Edgeworth, not content with recommending it in her "Practical Education," has given admirable

illustrations of it in her popular writings for the young. Pestalozzi, Fellenberg, and Père Girard of Fribourg, have made it their great instrument of instruction; and, under the name of "Lessons on Objects," it forms the principal feature of infant-school instruction.

In the family circle, as well as in public instruction, this mode of imparting information to children will be found most useful as a preparatory step to classical and scientific pursuits. Our directions on this subject are therefore addressed not only to those who direct infant or elementary schools, and to the teachers of junior classes in higher scholastic establishments, but also to those parents who, being blessed with cultivated minds, have the leisure and the laudable inclination to give their young families the benefit of their own information, and to the resident tutors and governesses who are anxious to forward the mental development of their pupils.

The scope of this work does not, however, permit us to enter into a minute investigation of the course of elementary instruction to which we allude. The few suggestions which we shall offer will, we hope, suffice to show that much useful information may be imparted to young people, before they commence the study of a foreign language, before they even know how to read their own. Many parents, in their embarrassment about the mode of occupying the minds of their children, hurry them into the art of reading, persuaded that they cannot be put too early in possession of this great instrument of intellectual education. They forget that no reading can supply the place of judgment, and that no power of judgment will avail much, without facts upon which its decision may be formed.

The learning of *reading* and *writing* ought to be postponed, until such time, previous to their being made available for useful purposes, as may be required for mastering them. For a child of eight years of age, two months will, by a proper method, suffice to learn to read, and two years to learn to write. In the mean time, he need not remain either in idleness or in ignorance; the period of childhood may be profitably filled up by the intellectual exercises and conversational instruction, which it is the object of the following Chapter to unfold.

SECT. V.—PHYSICAL EXERCISES, DANCING AND MUSIC—MEANS OF RELAXATION.

Before entering on the details of the course which we prescribe, we shall offer a few remarks on some of the exercises and occupations which serve as relaxation from intellectual pursuits.

Through the whole course of education, and particularly at an early period of life, mental labour ought to be relieved by long intervals of physical and healthful exercise in the open air. Should such be prevented by inclement weather, then in-door gymnastic sports, games of dexterity, and manual occupations, must be substituted. The time which children give to their sports is not lost to their mental improvement. When a few of them are together, they bring into activity all the resources of their minds, in devising games, or discussing the incidents arising from them; they examine, compare, judge, and decide with all the acuteness of maturer years; they suggest contrivances, propose plans, and support their opinions by arguments not devoid of good sense and logic; they, especially, exercise and extend their power of speech. In their incessant prattle, each gives to the others the benefit of the new expressions which he has acquired at home under different family circumstances.

Dancing may be comprised among gymnastic exercises; and, as such, it will prove very useful in giving firmness and pliancy to the limbs, ease and grace to the gait; and, by bringing together young people of both sexes under the eyes of parents and instructors, it will remove their natural awkwardness of address, and impart to them that freedom and polish of manners which are so desirable in society.

Vocal music may also be resorted to as a means of relaxation. It may serve to enliven all the occupations of youth, and to refine the feelings,—at the same time that it has a healthy influence on the lungs and chest. By giving fulness, clearness, and greater compass to the voice, it improves the oral expression, and prepares the organs for acquiring the various sounds and inflections of foreign languages. The power of free and lengthened respiration which it brings into action, will facilitate the exercise of elocution and public speaking; and, in many cases, it will prove a most efficient means of correcting defects of articulation.

The faculty of distinguishing and imitating musical notes, or, as it is popularly called, a musical ear, may be cultivated almost

in every one. There are some people, indeed, in whom this faculty seems totally deficient; but the deficiency often proceeds from their having seldom or never heard singing in their youth. By listening to singing, we learn to distinguish the relative value of the notes; our ear becomes educated and able to appreciate the nicest shades of tone. Thus, by repeatedly endeavouring to imitate others, we succeed in rendering our organs of voice capable of reproducing the sounds and intonations which the ear has received.

If vocal music were universally diffused among the people, and made an obligatory branch of primary education, it would, in the course of time, modify what is disagreeable in provincial accents, and produce more unity of intonation in the national pronunciation. It would insensibly improve the prosody of the language, and give it more harmony. The abuse of it should, however, be guarded against. It is worse than injudicious to teach grammar, arithmetic, or any other branch of instruction depending on the judgment, through such sing-song as is introduced in some infant schools in this country. The pleasure and consequent recollection arising from musical notes, can never compensate for the absence of the explanations and illustrations which scientific subjects demand.

Vocal music, confined to its proper sphere and cultivated within reasonable limits, is not only a pleasing and useful exercise; it is also a most powerful moralising agent. It renders the schoolroom more gay and more attractive, the paternal home more endearing, and public worship more solemn; it softens the rigours of poverty, soothes the sufferer, makes the rich benevolent, and the happy happier. (13.)

We cannot speak so favourably of instrumental music; because, not tending to improve the higher physical organs, or to cultivate any moral or mental faculty, save patience and attention, the knowledge of it is only of secondary importance in a solid education. Vocal music, in order to please, does not require superior skill on the part of the performer; but mediocrity in instrumental music is insufferable. The immense expenditure of time which the complete command of the piano demands, is lost to the acquirement of useful knowledge; and skill in it is too apt to engender vanity and lead to dissipation. Those who excel in instrumental music are not generally remarkable for the depth or the extent of their information; nor can it be reasonably expected from them, when all their mental energy is bent on unmeaning

notes; when all their time is consumed in exercising their fingers and their ears.

SECT. VI.—LINEAR DRAWING.

Of all the occupations which may engage the attention of children, as means both of relaxation and instruction, the most interesting, the most practicable, and the most useful, perhaps, is the art of linear drawing. Without mentioning the artistical professions of which this art is the foundation, it is an essential part of the manufacturing of the various articles of fancy and fashion, the excellence of which depends on the beauty of the pattern, such as carpets, paper-hangings, porcelain, jewellery, bronzes, clocks, silks, and many other articles, too numerous to be named here. But its usefulness is not confined to these; naturalists, anatomists, geographers, seamen, and travellers, must often resort to it, in order to fix their impressions and conceptions, or explain them to others. All those who are engaged in mechanical pursuits, such as lathe-turning, the making of furniture, the working of metals, the constructing of machines or of mathematical instruments, and all trades the object of which consists in the imitation of forms, would find, in the possession of that art, ample means of success in executing their designs, or communicating the result of their experience. In the higher walks of life, especially, who has not sometimes occasion to convey to an architect or a workman ideas and plans for which language is inadequate, and which a few pencil strokes could clearly and fully express?

As an auxiliary to instruction, linear drawing is equally important. Its practice gives acuteness and correctness to the eye, freedom and steadiness to the hand. It cultivates all the mental powers, *attention* and *perception*, by the extreme care and accuracy of observation required for faithfully imitating a model; *memory* and *reflection*, by drawing from recollection an object or copy previously studied or sketched; *comparison* and *judgment*, by copying the same models on different scales, and expressing perspective, in sketching from nature; *imagination* and *invention*, by modifying a given subject, or adding accessories; finally, *taste* and *discernment*, by attending to the forms, proportions, and the relative position of parts, which constitute grace and beauty. Drawing exercises the mental powers more effectually than any other art; and yet, how few parents cultivate a taste for it in their children with a view to mental development.

learner should sketch sometimes from nature and sometimes from approved original works.*

The learning of linear drawing is the more practicable under any circumstances, as it is not requisite that the instructor should be a perfect draughtsman: his office is not to correct the errors of his pupil, but merely to make him perceive them by a comparison of his own copy with the model, and thus to put him in the way of amending them himself. What the teacher needs is a correct eye, and sufficient taste and discernment to present none but fit models to the learner. If the professor, in giving his directions, always use the technical terms which refer to the art, and call by its name every part of the model or copy which is the object of imitation, not only will the child be furnished with materials for conversing with discernment on the interesting subject of the fine arts, but his vocabulary will be considerably enriched in various other departments, according as he sketches geometrical figures, architectural designs, landscapes, flowers, animals, human figures, &c. Thus are observation, language, and drawing combined in one exercise.

SECT. VII.—DRAWING AND INSTRUMENTAL MUSIC COMPARED.

Drawing and music, in order to be carried to any degree of perfection, would, each, demand the exclusive attention of a learner. The simultaneous pursuit of these arts would not permit him to attain the superior skill which it is desirable to possess. In general, and among females especially, the preference is given to instrumental music; because it draws on the performer loud applause, as it excites in the hearers a very lively pleasure; thus tending effectively to move the springs of vanity, from the power which it gives of riveting the attention of an admiring crowd. Music is, in fact, an art which seeks publicity; whereas drawing and its kindred art, painting, delight in retirement. These are more modest occupations; and, as a natural consequence, they are attended with less bodily fatigue or mental anxiety. The observations which we have made on these three arts would suffice to prove the error of those who sacrifice

* M. A. Dupuis, an eminent professor of drawing in Paris, has, in his method of instruction, happily combined these two principles, namely *drawing from nature* and *proceeding from the simple to the complex*. See his work *De l'Enseignement du Dessein sous le point de vue industriel*.

drawing to music; but, to render this error still more obvious we will establish a parallel between them.

Drawing and painting, as useful arts, claim a decided superiority over music, which is a mere accomplishment. The draughtsman, or the painter, may instruct as well as please; the pianist can only divert us. The cultivation of musical talent, requiring much time, and being unattended with useful results, is generally abandoned by females as soon as they have the care of a family, and by men as soon as they enter upon the business of life. Drawing may always be indulged in; it demands less time, and, in the hands of a mother, it is a powerful auxiliary to explain a thousand things to her children; in the hands of a man, it is of practical utility in all situations. If a skilful musical performer neglects for a year, or even less, the practice of his instrument, he becomes unwilling and almost incapable of performing; but, when we have once known how to handle the pencil and the brush, we may, after a lapse of years, take them up again with pleasure and dexterity. These arts are more available than music in all circumstances of life; for they may be practised at the bed-side of the sick, or in the same apartment with persons engaged in serious occupations; and they permit the artist to attend, as he is working, to the conversation of those who surround him. Music is debarred from these advantages. But, not only is drawing more available and more beneficial in every way than instrumental music, it is also more accessible to all classes of people, because the study and practice of it is less expensive—an advantage of no mean importance in a community in which accomplishments are not expected to be the exclusive privileges of the wealthy.

The enjoyment procured from the performance of an instrumentalist does not last longer than the time of execution, and does not extend beyond the persons who stand within hearing; the pleasure procured from a good drawing, or a good painting, is not limited by either time or space; the same pictorial performance may be enjoyed a thousand years hence, and a thousand miles from the place where it was executed. The same may be said, it is true, of a musical composition; but as this species of production demands the aid of proper execution to give it existence and call forth its merit, the enjoyment it procures remains still very limited. Musical composition, however, is out of the question in this parallel, because it is not usually made a branch of education, and it is only in this light that we now speak of

This art becomes, by an immediate consequence, ancillary to penmanship, and may lead to a graceful handwriting, as it cultivates the taste and imparts pliancy to the fingers: penmanship is a limited species of linear drawing, consisting of only a few lines: he who knows how to draw knows how to write. It assists in the study of geography, geometry, mechanics, astronomy, botany, natural philosophy, and other branches of knowledge, which require to be illustrated and explained by graphic representations. It is, in fact, one of the principal elements of a complete education. The general introduction of it in public instruction would be to artisans the source of creative skill in the mechanical arts; it would be to the wealthy the first step towards becoming enlightened patrons of the fine arts; and, by diffusing taste among all classes, it would increase the number of connoisseurs in painting, and consequently excite emulation among artists.

Drawing and painting speak to the mind as well as to the eye; they express and communicate ideas; they tell, they describe, they persuade, they recall impressions. Like the language of action, they convey thoughts and sentiments, by attitudes, gesture, and the expression of countenance. A similarity in the nature and the object of drawing and language, which are both arts of imitation, involves a corresponding similarity in the action of the physical and intellectual powers engaged in these pursuits. The same mental qualities serve to form the great painter and the great writer. Drawing ought, therefore, to be encouraged not only for its own sake, but because the mental training which its practice implies, will be a preparation for the study of a second language. The practice of graphic representation creates the habit of minute observation, and enriches the mind with images which may afterwards exercise the power of language. An artist can never view with indifference the sublime scenes of nature, or the wonders of art; he reads with additional interest descriptive and narrative works, and sees vividly pictured before him that of which others only read.

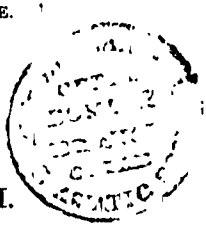
The art of design cannot, like penmanship, be acquired within a limited time: perfection in it, as in its kindred arts—oratory and composition—although unattainable, should always be aimed at; for the usefulness of these acquirements is in proportion to the degree of proficiency gained in them. In penmanship, legibility and expedition are the only essential requisites; and these two qualities may be acquired in two or three years, if we

begin at the proper time; but drawing, demanding considerably more practice, should be commenced much earlier, in order that facility of execution may be obtained in time to make it available for the cultivation of those branches of instruction which demand its assistance, and also that excellence may be attained in it within the usual period of education. This will be the more easily done as the practice of sketching, from the variety and the nature of the objects to be imitated, from their familiarity, their significance, and the pleasing ideas they awake, is infinitely more interesting to children than writing, which always presents the same forms. Not only is it more interesting, but the first steps in it are easier, because its elements may be simplified at will; the taste of the child may be consulted in the choice of the model; and he may, as he proceeds, efface and amend, until he brings out a pleasing production. These are all elements of success and inducement to the child, which are not afforded by the practice of writing.

Nature admirably favours the early learning of linear drawing: children, from the most tender age, evince a strong desire to sketch familiar objects in their complete form; they delight in imitations which speak to their imagination; but all interest would be lost, if they were desired to draw only detached parts of objects. We should, then, on this point, follow the dictates of nature, and present at first to the child complete but simple forms. In this, as in everything else, the learner must pass gradually from the simple to the complicated. It is by attending to the general outline of a model, whether an object or a copy, and subordinating the details to it, that the eye is educated, that the proportions of the whole are understood, that harmony is introduced in the arrangement of the parts, and that a bold and rapid execution may be acquired. The means are thus made consistent with the end; for either in pictorial or in literary compositions, the artist or the writer, first sketches his subject, and afterwards successively attends to the distribution of the parts, and to the finishing of the whole. It must also be borne in mind, that drawing from nature is one of the ends proposed; the objects themselves must therefore be early presented for imitation in their various aspects; this will accustom the eye to judge of their forms and proportions, as also of the effect of light and shade, better than could be done from drawings and paintings: but, as it is useful to study the manner in which eminent artists have themselves represented those objects, the

music and drawing. Instrumental music leads to no sort of information; drawing is an auxiliary to many arts and sciences. Music stands isolated; the perfect command of an instrument may be attained without the aid of any branch of knowledge whatever; skill in painting, on the contrary, cannot be attained without a serious study of perspective, history, anatomy, natural history, or other sciences, according to the department of painting to which the learner devotes himself. Folly and ignorance may exist with high digital power on an instrument; but an eminent painter must be a man of sound sense, deep observation, and extensive reading. As, by a natural effect of sympathy and assimilation, men seek each other's society according to the similitude of their tastes and pursuits, an instrumentalist or a vocalist will often be in company with the votaries of pleasure, for the most part frivolous and dissipated people; while the draughtsman and the painter will be likely to associate with architects, engineers, naturalists, and other industrious well-informed persons.

From these remarks there can be no hesitation as to which of these arts the preference is due. Yet we do not, for a moment, think that instrumental music should be altogether abandoned: it contributes too largely to the charm of society. Let it be cultivated, especially by those who have a taste for it, but as a secondary, not as a primary branch of education; as a means of enlivening the family circle, not as a means of exhibiting in large assemblies, and exciting in young persons an inordinate love of admiration. Let it not, above all, engross a time claimed by more useful and more intellectual acquirements.



CHAPTER II.

PRACTICAL COURSE OF THE NATIVE TONGUE.

CONVERSATIONS ON OBJECTS.

Preliminary Remarks.

We will now enter upon the course of elementary instruction which is proposed as a substitute for classical studies, and as a means highly calculated not only to cultivate the perceptive, observant, and reflective powers of children, but also to extend their practical acquaintance with the native tongue, by making it the vehicle of diversified knowledge, and the ground-work of mental discipline. But as the conversations and intellectual exercises of which this course consists should be proportioned to the progressive development of reason, which varies in different individuals, it must be observed that the age which has been assigned for commencing them is only approximative.

Although the order in which the various conversations on objects have been introduced may be modified according to circumstances, it must not be regarded as altogether a matter of indifference; for we have endeavoured to conform to that which nature follows in gradually inuring the mind to habits of investigation. She imperatively enjoins that the first efforts of the child should be directed to the improvement of those powers by which he may form clear and correct notions of things. He should therefore be made to pass progressively through the exercises in perception, observation, reflection, and reasoning.

Another rule which should be strictly adhered to is, that, whenever a topic, an exercise, or a branch of information, acknowledged to be useful, has been entered upon, it should be occasionally repeated, until the children have a clear insight into the subject brought before them, or until the object proposed from it has been attained. It should also be borne in mind that the following course, although intended as a preparation for the scholastic instruction of boys, is equally suitable to girls; for,

until the age of twelve, the intellectual education should be the same.

SECT. I.—EXERCISES IN PERCEPTION.

1. *Names of objects, their Parts, Matter, and Colour.*

From the moment that a child articulates distinctly, various familiar objects should be offered to his notice, and their use explained; their names being, at the same time, clearly uttered for him, he should be made to repeat them slowly and aloud. But he must not be forced into premature efforts to speak, lest he should acquire habits of indistinct and defective utterance. Premature walking is not more injurious to the organs of motion than is premature speaking to the vocal organs. In order also to guard against fatiguing him by a dry repetition of words, the instructor should enliven the exercise by making, in plain language and in a playful manner, some simple observations on the nature and use of the things which he is called upon to name.

This exercise should, at first, be limited to a few objects at one time, and the same things should be repeatedly presented to him associated with their names, until he perfectly knows these names. His vocabulary should be gradually extended by the introduction of new objects which he is made to observe and name, such as articles of dress, food, furniture, everything which he can hold in his hand, or which may be seen either from the window or out of doors. This mode of proceeding will soon put a young child in possession of a considerable number of useful nouns. It is a triple exercise in perception, articulation, and memory, which must, from the variety of objects and the movement required in passing from one to the other, be more interesting to the child, as it certainly is more profitable at this age, than the ordinary practices of conning for months over the same six-and-twenty, *to him*, unmeaning letters, reading nonsensical trash, or learning by rote the unconnected words of a spelling-book or dictionary.

As the child's intellect opens and becomes capable of examining objects minutely, of distinguishing their resemblances and differences, of noticing their *parts*, their *matter*, their *colour*, their *form*, and their *number*, his attention should be successively directed to all these points. Thus will his mind be early brought in contact with the external world, and be duly exercised by ascribing to every object of sense its qualities and peculiar condition. He will

also easily remember the words, when the ideas they signify are once clearly apprehended. A correct acquaintance with the meaning and application of words must not be deemed a matter of little moment in the first years of life. If we consider the disastrous results to which ignorance on these points has led, and the inconvenience which often arises to the best educated among us from this single source, we shall find that time well employed, which is devoted to securing a knowledge of the meaning of words. This practical instruction may be commenced with the second period of youth—at the age of six. Curiosity and the perceptive powers being then in full activity, the child's attention may be easily cultivated through them, and a spirit of observation, analysis, and comparison, the foundation of a correct judgment, be early fostered.

The first inquiry to be made in the examination of an object consists in ascertaining the parts of which it is composed. These are sometimes so minute that considerable attention is requisite to discern them all. So important is this inquiry, that an acquaintance, for example, with all the parts of a plant, and with their forms and colours, constitutes the knowledge of its botanic character, and involves a considerable portion of the botanic technology. The child must be shown how all the parts of an object are connected, how they harmonise, and how far each is indispensable to the completion and pleasing effect of the whole: thus will he be accustomed to discriminate what is principal from what is accessory, what is useful from what is merely ornamental.

By attending to the matter of which the object and its parts are composed, the child will learn how to distinguish animal, vegetable, and mineral substances; he will form clear ideas of what is natural and artificial, simple and compound, native and foreign, indigenous and exotic.

The next consideration will be that of colour: this beautiful property of matter, diffused over all the works of nature and art, will, by the infinite variety of its shades and combinations, offer to the visual faculty an endless means of exercise. Accuracy of perception in reference to it will prove useful for various branches of knowledge and pursuits in life. A due attention to the diversity of colours, to the proportion of parts, and to the gracefulness of forms, considered as the elements of beauty, will sow the seeds of taste.

An acquaintance with colours can be very early imparted to a

child. To enable him the better to distinguish them and recollect their names, the instructor should be provided with a tabular illustration of their prismatic order; he should, first, point out to him the primitive colours, red, yellow, and blue, then the three intervening compound colours, orange, green, and violet; and, afterwards, their various shades, from the lightest to the deepest hue. Glasses of different colours, placed by pairs one over the other, would afford him the means of perceiving the effect of the mixture of colours. He may be shown that white is the colour of light, or the blending of the prismatic colours, and that black is the absence of them. As all imaginable shades of colour can be produced by a diversified mixture of red, yellow, blue, white, and black, the child may be exercised in discovering which of these elements prevails in any compound colour presented to his sight.

2. *Numbers; Ball-Frame.*

The elements of arithmetic may enter as part of the exercises of this early period: the practical nature of its first rules is well suited to the understanding of children. Relations of number and arithmetical calculations are also, from their simplicity and mathematical accuracy, admirably adapted to the training of the young mind to habits of attention and reasoning. But, before a child is exercised in mental calculation, which at this early period might overtask his reflective powers, and before he is taught the numerical figures, which are signs of abstract ideas, he should be accustomed to associate the numerical adjectives with the names of objects which admit of computation; for these adjectives, when used by themselves, being mere abstractions cannot impart clear and correct notions of number. A variety of similar things should be employed, particularly the current coins of the country, counters, cards, inch square, or cubic blocks, which, by gradual addition and subtraction of units and groups, would teach the value and relation of numbers as also the fundamental rules of arithmetic; he should be taught to express in numbers the dimensions of objects by applying to them a unit of measure, the inch or foot, as the case may require. When the child has frequently associated real objects with the ideas of number, the numerical names and figures will easily pass in his mind from the concrete to the abstract state.

The ball-frame, consisting of one hundred sliding balls on ten horizontal parallel rods, may, in the hands of a skilful instructor, not only assist in explaining the numeration, that is, the formation and names of numbers, but also serve to teach how to solve readily the elementary questions of addition and subtraction, multiplication and division. If the balls be of two contrasting colours and strung alternately, the eye will be pleased, attention captivated, and calculations considerably facilitated. With this frame a child can himself discover the products of the multiplication of any two factors under ten; he sees that these factors can be inverted, that multiplication is only an abbreviated form of addition, and thereby clearly understands the principles of this operation. The mental act, also, by which he finds out these products will enable him to recollect them better than the absurd mechanical parroting of the multiplication-table.

This frame is not a late invention, as may be seen in Friend's work on Arithmetic, published fifty years ago; it has been used for a long time in the primary schools of France and Germany. It must not be confounded with the abacus of the ancients, in which one line of beads or balls was made to stand for units, the next for tens, another for hundreds, and so on. But, although the abacus was originally intended for casting up accounts, it might also prove useful in teaching the first principles of arithmetic. The Russians and the Chinese have, from time immemorial, performed calculations by means of such frames; but that of the latter, called *shwan-pan*, differs from the one adverted to here by its having only five beads on each wire, the relative values of which are distinguished by their size and colour.

The one hundred ball-frame is preferable to that which is composed of 144 balls, and is adopted in many infant schools in this country, inasmuch as it answers all the purposes of calculation, and besides clearly illustrates the principle of the decimal system, since the relation of units to tens and hundreds is observable through all combinations and computations. It is a matter of great importance that a child should in his first conception of number perceive the simple and beautiful arrangement by which a place is assigned to the different powers of ten that compose any number. In fact, a knowledge thus acquired of the composition of numbers leads to a rapid understanding of the mode of representing them by numerical figures. To effect this last object, pasteboard, wood, or brass figures would be found more

convenient and more interesting to a young child than writing on paper or slate.

At a more advanced age, towards the end of the second period, he should be exercised in mental calculation, passing very gradually from simple to complex operations. This exercise, which admits of endless variety, accomplishes several objects: it brings into action the reflective and recollective powers; it disciplines the understanding in exact reasoning; and gives habits of calculation, such as the daily transactions of life require. But not only is arithmetical expertness useful in the practical business of life, it is also indispensable as the basis of all real progress in the mathematical and experimental sciences, in which the learner has constant need of applying the rules and performing the operations of arithmetic.*

3. *Fractional Numbers; Fractional Apparatus.*

When a child has a clear idea of numeration and of the elementary rules in whole numbers, he may be initiated into the first notions of fractional arithmetic. These notions, intricate as they are, when taught abstractedly through the fractional notation, become extremely simple and intelligible, even at a very tender age, when explained by means of visible illustrations. The different objects which have been mentioned for counting in whole numbers may equally serve for imparting to young people the first notions of fractions. A number of such objects, being considered as a whole and variously divided into equal parts or fractional numbers, would, by the addition and subdivision of these, illustrate the relative value and the elementary operations of simple fractions. This, however, may perhaps be still better effected by the following contrivance.

Let about 16 or 18 thin slips of wood or pasteboard, about half an inch in breadth, be made all exactly the same length, say one foot. (This length is convenient, and will, besides, accustom the eye of the child to a useful measure.) Let them be divided by a line across the breadth, the first into two equal portions, the second into three, the third into four, and so on up to the eleventh, which will be composed of twelve equal parts; a few

* See, on this subject, an article by A. de Morgan in *Quarterly Journal of Education*, No. IX., or in the *Schoolmaster, Essays on Practical Education*. See also *Lessons on Number, as given in a Pestalozzian School, Cheam, Surrey*.

other slips may be respectively divided into 15, 18, 20, 24, 36, 48, 60, 72, and 84 equal parts, which numbers are chosen on account of their having a great number of divisors. Let the lines indicating different subdivisions be of different colours, and those indicating equal portions in the different slips be of the same colour—all the halves throughout being thus of one colour, all the thirds of another, and so on. Let also the denominator, that is, the number of parts into which the foot-slips are divided, be marked at one of the ends of each slip. These coloured lines and written denominators will greatly assist in distinguishing at once the different fractions, reducing them to their lowest terms, and finding out their common denominator.

The pupil with these slips placed side by side under his eye, should be called upon to observe the various subdivisions of the foot which are marked on them, and be told the names by which are denominated the equal parts of each slip, *halves*, *thirds*, *fourths* or *quarters*, &c.; he may, from these, discover by analogy, the names of the others. He should be made successively to notice that $\frac{2}{2}$, $\frac{3}{3}$, $\frac{4}{4}$, &c., are equal to one another; that $\frac{1}{2}$, $\frac{2}{4}$, $\frac{3}{6}$, &c., are the same; that $\frac{1}{3}$ is greater than $\frac{1}{4}$, $\frac{1}{4}$ greater than $\frac{1}{5}$, &c.; that $\frac{2}{3}$ are less than $\frac{3}{4}$, $\frac{3}{4}$ less than $\frac{4}{5}$, &c.; that the fraction is greater in proportion as the numerator is increased, or the denominator lessened, and *vice versâ*. He should add, subtract, find a common denominator, and reduce fractions to their lowest terms. In short, he might, by means of this simple apparatus, and, under the guidance of a judicious teacher, gain a clear acquaintance with the denominations, nature, value, and properties of common fractions, long before he could safely be introduced to their numerical symbols and to their abstract forms.*

4. *Forms; Geometrical solids; Architectural game.*

In order promptly to familiarise the pupil with the most general forms and the terms expressive of them, a collection of small geometrical solids should be exhibited to him, such as spheres, cylinders, cones, prisms, pyramids, and the regular geometrical bodies in different dimensions, as also a cone with its several sections. In minutely examining each of these, his attention may easily be directed, by a natural analysis, from the

* For more ample details on this subject, see an excellent article of A. De Morgan, in the *Quarterly Journal of Education*, No. X.

solids to the surfaces, triangles, quadrilaterals, and polygons; from these to the angles, lines, and points. In comparing them afterwards, he may find out himself their differences, and classify them; and, in stating the result of his examination, he is led to the use and to the definition of the scientific terms which designate them, and to the consideration of the first elements of geometry.

By a reference to the geometrical solids a child may easily understand what is meant by *vertical* and *horizontal; perpendicular* and *oblique; parallel, divergent,* and *convergent; right, acute,* and *obtuse angles; circle, circumference,* and *diameter;* he may be shown the principal properties of triangles, the mode of measuring and dividing angles, the relative length of circumference and diameter, and may be taught by means of small square blocks or cubes, how to measure rectangular superficies and solids.

If the child be made to sketch the outlines of these solids, it will be a further preparation for his future study of that science; for these diagram sketches, within the power of a young child—and his first step in the useful practice of drawing from nature, will direct his attention more closely to the geometrical forms, will familiarise him with the terms and graphic representations of them, and will give him some practical notions of perspective. The precision and accuracy of eye, gained, at the same time, by the habit of drawing, would considerably assist him in clearly conceiving the forms, proportions, and dimensions of objects. The facility and correctness, also, with which he will execute these figures, if he has early practised drawing, will, at a future period, render geometry much more attractive; whilst the elements of this science will, in their turn, tend to give a useful direction to linear drawing.

The practice of ascertaining the various parts, substances, colours, and forms of objects, is an effectual preparation for the study of the natural sciences; it cannot fail to impart accuracy and acuteness to the perceptive powers of young persons; it will accustom them to observe and analyse things minutely; while all the terms relative to these different points will considerably extend their vocabulary.

To those who advocate for children science in play, we will suggest that the young mind may be effectually familiarised with forms and proportions by means of an architectural game composed of brick-shaped pieces, and others in imitation of those

which enter into the construction of buildings—blocks of different sizes (say, from one inch to four inches in length, one inch in breadth, and half an inch in thickness), cubes, arches, columns, with detached bases, capitals, and mouldings, in different orders of architecture. These building materials may be so contrived as to present, by their various combinations, illustrations of geometrical propositions, and, by their superstructure, edifices in different styles of architecture. They should consist of close-grained wood, of two contrasting colours, so as to please the eye by their neatness and symmetrical arrangements; and if they be made with mathematical accuracy, and on a scale founded on the national measures, they will be easily raised in conformity to any architectural design, while the eye will be early habituated to a useful measure. The author, anxious to give his children the benefit of such a game, has constructed one with box and Brazil wood (white and red), composed of about six hundred pieces of various sizes and geometrical forms, on the above-mentioned scale of measurement. It has been for his young family not only an exhaustless source of pleasure and instruction, but an efficient means of forming habits of patience and enticing them to efforts of invention.

SECT. II.—EXERCISES IN OBSERVATION.

1. *Properties, Comparisons, and Classification of objects.*

From the age of eight or nine, when the child's perceptive faculties have been exercised on the most apparent properties of things, and when he has learned to confine and prolong his attention, he should be required to examine objects more minutely, to compare them under different points of view, and to state in what particular two or more resemble or differ. These exercises would prove highly interesting to young people, who delight in discovering differences between similar things, and resemblances between different things. The judgment, according to Locke, is exercised by the first act, and the imagination by the second: all the intellectual powers, in fact, which have comparison for their basis, would be thus highly cultivated. He who is best able to compare will know best how to analyse, to abstract, to generalise, to classify, to judge—in one word, to reason.

Various objects should be successively submitted to the organs of sense, and the relations in which they stand to each other be

duly examined, in order that, by observation and comparison, their particular properties may be discovered, as well those which are relative to our constitution as those which are inherent in the objects themselves. A true knowledge of things consists in a perfect acquaintance with all their properties. When objects have been considered in all their bearings, the child may be directed how to classify them according to the similarity of their essential attributes. It is, in fact, the relation of resemblance which, by the general notions and corresponding general terms that flow from it, becomes the source of classification and definition, and of all that is valuable in language.

As the attributes inherent in matter may not all present themselves to the mind of the teacher at the very moment when he wishes to direct the attention of the pupil to them, tables containing in juxta-position adjectives of opposite meanings would enable him to point out all the properties the presence or absence of which can be ascertained in objects (14).

Every new discovery which results from the investigation of objects exercises the understanding, leads to a knowledge of the true essence of things, and stores the memory with adjectives and abstract nouns, the chief materials of descriptive and philosophical language. A familiarity with such terms, by generating a habit of nice discrimination, and enriching the imagination with vivid conceptions of things, constitutes the characteristic elements of eloquence. Uneducated people are particularly deficient in these two species of words. The child being also led to distinguish the properties which are natural or artificial, essential or accidental, permanent or transient, absolute or relative, and to discover those which belong to one object exclusively, or are common to several, will find no difficulty in making classifications, or availing himself of those already existing, and of their corresponding nomenclatures. Classification is the indispensable complement of observation.

As young persons collect facts, they must be frequently exercised in classifying them with reference to their resemblance or difference. If any number of objects is considered with regard to one or several points of resemblance, the collection constitutes a class named *genus;* subdivisions of these into classes of objects having properties in common and distinct from the rest, form as many *species;* finally, when, on a closer examination, single objects are considered in reference to properties which are peculiar to them, they are denominated *individuals.* The child

must be shown that the terms *genus* and *species* are relative: the same class which is a genus with reference to the sub-classes, or species included in it, may be itself a species relatively to a more extensive, or, as it is often called, a superior genus. *Bird*, for example, a genus with regard to the different species *eagle*, *sparrow*, &c., is, in its turn, a species of the genus *animal*, which is itself a species with respect to the superior genus *organised being*. *Filial love* is a species of the genus *affection; affection*, a species of the genus *goodness;* and *goodness*, a species of the genus *inclination*. The distinction of generic and specific terms applies to a very extensive range of mental conceptions.

The complex operation of classifying things according to their points of resemblance, and of distinguishing them by their points of dissimilarity, is one of the highest exercises of our reason and the most admirable effect of analysis. It will develop in a child the powers of observation, abstraction, and generalisation, and will prepare him for the study of the natural and experimental sciences, by giving him habits of inductive reasoning,—a principle on which these sciences rest.

Nothing is more beneficial to the mind than the early habit of referring particular ideas to general principles, and classifying objects and the notions acquired about them. The memory will best retain the information entrusted to its keeping when arranged according to some principle of generalisation. Classification leads to the clear conception and exact definition of terms; because the names given to our generalisations in order to classify things, are connected in the mind with the peculiarities that characterise these things: it becomes the more useful as ideas accumulate on the mind; for, in general, confusion does not arise so much from the number of ideas, as from the incapability of conceiving them clearly and arranging them in a proper order. Classification is the ground-work of inductive philosophy, and of all scientific investigations.

2. *Incidental investigations about Objects.*

The act of observing, which springs from the natural desire for knowledge, reacts on that desire and stimulates it, when it has become a habit: if, therefore, the child's powers of observation have been judiciously exercised, his inquisitiveness will increase with his mental development. He may then gradually

be brought to investigate incidents connected with an object: among others, what are its different uses, the country whence it comes, the mode of production, the process of fabrication, the instruments employed in making it, and the trades concurring to its completion.

The different uses to which things are applied depending on the properties which they possess, one of these considerations will easily lead to the other. If, therefore, a child is acquainted with the use of an object, he may be requested to infer what must be its properties; or these being known to him, his inventive power may be exercised in finding how it can be rendered useful: thus is he led to the investigation of causes and effects. At a more advanced age, he will be aided in the search by visiting manufactories, or exercising his ingenuity, as has been recommended, in working various substances; for the properties of matter are best ascertained by the modification which it undergoes in the arts.

By frequently inquiring into the uses of things, a child forms the valuable habit of estimating everything according to its utility, and of turning it to account. The inquiry into the mode of production and fabrication will tend to cultivate in him a spirit of investigation and invention, whilst the constant practice of ascertaining causes and effects will foster dispositions most favourable for afterwards making discoveries in the arts and investigating truths in the higher sciences. Mere chance has less to do with the work of invention than is generally supposed: in most instances, the lucky accident which gave birth to the discovery has but set in motion a certain train of thought in an already prepared mind.

In speaking of the place where the manufactured article or the substances of which it is composed, are produced, the preceptor has an opportunity of conveying interesting information on the natural productions of various countries, especially on those of his pupils. Should he have within reach a general map, or, better still, a large terrestrial globe, he will add considerably to the benefit of the lesson by pointing out the situation of every country or town, as its name is mentioned.

In the first examination of objects children should be induced to discover what belongs to nature and what to art. Natural substances assume, by the effect of art, so many forms and appearances, that, in many cases, a great deal of ingenuity is required to find out the original materials. These investigations

will bring within the range of conversation the three great subdivisions of natural substances, namely, the animal, vegetable, and mineral kingdoms, as well as the various arts of life.

These and the other topics which have now been enumerated as coming within the scope of these conversations, will considerably assist children in comprehending books when they begin to read, and will prepare the way for their future study of many interesting branches of instruction. A variety of useful notions is elicited, which it would take many years to obtain by the ordinary routine of experience, and which never forms part of a college course.

3. *Cautious Gradation to be observed in these Lessons.*

One of the chief objects of early lessons ought to be to excite in a child such a love of knowledge as will induce him to be ardent in its pursuit. His natural desire of variety should be indulged, and the gratification of his curiosity should be combined with his improvement. To make him a more active agent in these lessons, he should, at first, be induced to point out objects, the names or properties of which he does not know, or which he may have forgotten. This simple act of reflection will prepare him for making other inquiries afterwards. In the first stages of these lessons, he should be frequently allowed to choose the objects about which he wishes to be informed; he should be particularly encouraged to ask questions and make observations. Whatever is interesting to him is an appropriate subject of investigation. He will learn with delight new facts and new terms connected with an object already familiar to him, or information given him in answer to his questions; and what he thus learns he easily remembers. The remarks of the child will, in many cases, show the instructor in what manner the subject may be treated. When the topics touched upon are not new to him, he may be questioned about them; when they are, he should receive whatever information is suited to his wants and age; the instructor, at the same time, keeping up his pupil's attention by kindness of manner, liveliness of delivery, and occasional anecdotes.

The benefit to be derived from the conversations on objects will greatly depend on the cautious gradation observed in introducing new considerations, and in not allowing the lessons to

continue so long as to produce fatigue. They should cease before the child evinces symptoms of weariness; for it is desirable that the impression on his mind, at the conclusion of the lesson, be pleasurable, in order that he may feel a lively desire for its renewal. Protracting the investigation to an improper length would divest it of all its interest. Ten minutes of painful restraint may create in a child a strong dislike for the learning which is forced upon him: a week's or a month's delay would probably find him in a more favourable disposition; or a trifling change in the mode of proceeding on the part of the teacher would suffice to make the same instruction agreeable and profitable. It is often the teacher who is to be blamed when the pupils are inattentive and take no interest in the lesson.

These exercises in observation, which, in the commencement, ought not to exceed a few minutes, may be gradually lengthened, as children acquire with age greater command over their attention, and greater desire for information. Many objects should, at first, be offered to their notice, because the immaturity of infancy does not permit a minute investigation of each; and attention can then be kept up only by variety and novelty. As their powers of observation and reflection increase by exercise, the subjects of consideration must be gradually diminished, until one may suffice at a sitting. Thus, as they advance, being required to attend more closely to a single object for a greater length of time, more unity of design is preserved, and more depth of information is acquired. But let it never be forgotten that long confinement and protracted application to one subject should be sedulously avoided. There must be no gloom, no misery, associated with the first intellectual exertions: happiness is the privilege of childhood.

SEC. III.—EXERCISES IN REFLECTION.

1. *Size, Weight, Durability, &c., of things.*

When children have been for some time engaged in conversing on the subjects above alluded to, and when reading can be practised concurrently with and subsidiarily to oral instruction, that is, towards the age of ten or eleven, the instructor will introduce considerations of a higher character. He must now

exercise the reflective powers of his pupils; and, for this purpose, he must enlarge their sphere of observation, and explore with them the fields of science.

The properties of things, or the laws of nature respecting them, which are submitted to the attention of young persons, must now be considered as the elements of scientific knowledge. These properties, or, to speak more philosophically, the relations in which things stand to each other, may be classified under three heads: 1. Relations to our constitution, as their *colour, taste, temperature, form,* &c.; 2. Relations to other particular substances, as their *compressibility, fusibility, inflammability, fragility,* &c.; 3. Relations to bodies in general, that is, which may be predicated of all bodies, whatever be their particular properties, as *rest, motion, extension, quantity,* &c. The first two kinds of properties are elicited by comparison, and are relative; those of the third kind are independent of relation to any particular substance, and are absolute. The properties which bodies possess as belonging to some particular class of beings, form the data from which to reason in natural history and the physical sciences; the properties of the third kind form the subject of our reasoning in all mathematical investigations.

In addition to the consideration of the parts and substances of objects, to the notions of number, form, colour, and other sensible properties, to which we have already alluded, the children will be made to estimate the size, weight, durability, and value of things, the relative proportions of different measures of the same kind, the relative positions of various objects, or of the different parts of one object, their distances from them, and from each other. For this new series of exercises the learners should be furnished with the various measures in common use, a yard and foot; a quart, pint, and quartern; scales, steelyard, and weights; a dial with revolving hands; gold, silver, and copper coins; a plumb line, a square rule, and compasses. To these should be added the measures, weights, and coins of any foreign country whose language they are to learn.

During the lesson these measures should always be at hand, and referred to as a test in the examination of objects. By frequent application of them, children would form a just idea of measures of all kinds, of the subdivision of time and the value of money, and would soon be familiarised with the calculations required for the ordinary purposes of life. A small sum, made up of the current coins of two countries, would enable them to

practise various calculations in reduction and exchange. Different graduated measures of capacity and weight would offer similar exercises to discover their relative value, and show how many measures of one kind are equivalent to one measure of the other. Many interesting arithmetical problems may be founded on the facts thus acquired.

We need scarcely advert to the superiority of this practical instruction over the senseless and irksome task of learning by heart tables of weights and measures, often imposed on children, when they have no idea of what is meant by the technical terms of which they are composed. The details so often found in books of the value and measures of things, the dimensions of buildings, the distances of places, the heights of mountains, the length of rivers, &c., can convey but vague and erroneous ideas to those who do not possess clear notions of the current money, of ounces, pounds, and tons weight, of pints, gallons, and bushels, of feet, fathoms, and miles.

The parts and the substances of objects being now investigated more philosophically than heretofore, will call the attention of the young observers to the classification and nomenclature of organic and inorganic matter, and to the various departments of natural history and natural philosophy. The mention of colours may, henceforth, afford the instructor opportunity of giving to inquisitive learners an insight into the theory of light, of explaining, by means of the prism, the phenomenon of the rainbow, and of investigating many optical problems. Considerations of quantities, forms, dimensions, superficies, and magnitude, will gradually lead to practical arithmetic, to the elements of geometry, and to the measurement of plane and solid figures; those of weight to the principles of gravitation, and, from them, to the elements of mechanics and astronomy; those of distance to perspective and to the mention of the telescope and of astronomical discoveries; those of durability and time to chronology and history; those of value and cost to the elements of wealth and to the first principles of political economy; references to the countries from which objects come will furnish the opportunity of entering upon geographical inquiries. Thus, by the force of association, numberless chains of ideas, depending chiefly on the information and habits of study of the instructor, will exercise the reflective powers of the young, and enrich their memory with extensive and useful knowledge.

2. *Physical Geography—Geographical box.*

In all investigations the instructor should seize every opportunity to turn the conversation on useful subjects. But, among those which may engage the attention of the young, geography is one of the most suitable; for it is addressed to the senses and memory as much as to the reflective powers.

The child is taught the points of the compass relatively, first, to the position of the room in which he is, and, then, to the different parts of the house. He may, afterwards, when he is out of doors, ascertain the geographical direction of the streets, the course of the river, and the relative positions of different buildings. But, before the denominations of east, west, north, and south, are mentioned to him, he should be told of the rotundity of the earth as well as of its double rotary motion, and be made to observe the direction of the sun, its successive positions in the heavens—in the morning, at noon, and in the evening. These terms, arising out of the want which he has of them, will be clear, and easily retained. How many young people are there who, for want of this previous practical information, see in the cardinal points only the four sides of a map!

The geographical terms expressive of the various natural subdivisions and physical characteristics of land and water can never be defined so as to give children clear and accurate ideas of the things which they represent. They are best explained in the presence of the things themselves. But as many of these objects cannot be seen in their natural state, their place might be supplied by a small model in relief of an imaginary portion of the earth exhibiting its principal features.

The construction of such a model presents no difficulty: the author, applying to the education of his own children most of the suggestions thrown out in these pages, has made one himself for their use. A lake, a Mediterranean sea, bays, &c., are carved out of wood; and mountains, rocks, banks of rivers, and undulations of the ground are made with putty; the whole is painted in oil of the natural colour of the objects represented,—white for the snowy peaks, green for the valleys, &c. This model fits in a box one foot square by 2½ inches in depth, of which it occupies the half; the inside is painted a light bluish green, to imitate the colour of the sea.

At the time of using this box it is half filled with water, which,

coming in contact with the sides of the model and passing under it, produces peninsulas, bays, harbours, creeks, lakes, &c.; and thus gives a faithful and most vivid representation of the physical character of the terrestrial and aqueous globe. To add to the usefulness of this apparatus, a magnetic needle is placed on a pivot fixed on one of the mountains, thus indicating the relative geographical position of every spot.

We need scarcely say that a geographical lesson founded on these elements is highly instructive and entertaining to young children. Their natural curiosity is excited at the sight of this model; and they anxiously expect any information which the instructor is about to impart to them on the physical constitution of the globe, and the natural phenomena connected with its existence. They may be called upon to define in their own words all the terms, of which they have the sensible signification before their eyes; they see that an island is the counterpart of a lake; a cape, of a bay; an isthmus, of a strait: guided by the needle, they may be made to state the relative position of different places, as well as the directions of streams and chains of mountains in reference to the points of the compass. A survey of this fac-simile will give them an idea of the innumerable beauties of the terrestrial surface; it will bring to their notice its verdant plains, its diversified hills, its winding rivers, expanding as they run down to the sea, which spreads its immense sheet over more than half the globe. They may be told of the indispensable agency of water towards the fertility of the earth, the existence of man, the arts of life, and international communication; they may be told of navigation in modern and ancient times, of the mariner's compass and the polar star, of sailing and steam vessels, of maritime discoveries, of celebrated navigators and travellers, and of many other interesting subjects, which would be called to mind by the sight of land and water.

Children take a lively pleasure in travelling, with the end of a pointer, over this Lilliputian world, and naming each place as they journey on; sometimes following down a river from its source to its mouth, or seeking a defile in a mountain to pass into the valley at the other side; sometimes resting on a table-land, or ascending a peak; at other times, going along the coasts over strands and cliffs, standing on a promontory, or venturing on a sand-bank; now and then shouting with joy at the discovery of a volcano, a cavern, a grotto, a cascade, or a cataract. All these objects will recall to the mind of an instructor conversant

with the wonders of our planet, the most remarkable among their corresponding realities: the occasional mention of them, at the moment when his young hearers' attention is rivetted on the subject, could not fail to be eagerly received. These geographical topics will by an immediate connection turn the conversation on geological and atmospheric inquiries, on the structure of the earth, and the distribution of organic life over its surface; its mines of coal, salt, metals, and diamonds; its various strata and fossil remains; on tides and winds, hot and mineral springs, water-spouts, earthquakes, volcanic eruptions, and a thousand other natural phenomena. Thus will they, in an impressive manner, become rapidly and thoroughly acquainted with the elements of physical geography and the great laws of nature, and be excited, at their entrance upon these studies, by the desire of proceeding farther.

When a child has been familiarised with these elements, his next step will consist in being made acquainted with the nature of maps, that he may early know how to use them, and be induced to refer to them in the course of his reading. This he will accomplish most effectually by constructing some himself, under the guidance of his instructor. If he has been early encouraged to sketch from nature, he will easily draw with reference to the points of the compass the plan or map of the room in which he studies, and afterwards that of the premises and grounds surrounding the house in which he lives. This will enable him the better to understand the relations which maps bear to the reality, and consequently to refer to them with the more profit.

After he has executed several maps of particular places, he may undertake the tracing of whole countries. A black globe of two feet in diameter, at the least, made so as to admit of delineations in chalk, would considerably facilitate this object and enable him to solve many geographical questions. A skilful teacher will see at once all the advantages which could be derived from such a globe.

The clear notions of number and measures which the child may, by this time, have acquired will facilitate his further progress in the study of geography, by enabling him to conceive rightly the various numerical considerations which occur as part of that science, such as the superficies of the earth, the extent of countries, the relative distance of places, the amount of population, the length of rivers, the height of mountains, the measure of degrees, and others.

3. *Political Geography; Globe with National Flags.*

Equal in importance to a knowledge of the physical constitution of our globe is an acquaintance with the various races of men who cover its surface, and the numerous political communities into which they are formed. A complete course of geography should comprise these different subjects of consideration. When children have clear notions of the extent, form, composition, and external configuration of the earth, they may with profit be told of the different countries into which it has been subdivided, and be informed of their resources, and of every thing relating to the nations by which they are inhabited. This information constitutes political geography, which is the foundation of political science; for, unless we know the condition of a country and its inhabitants, we cannot reason correctly on their wants, customs, and means of prosperity.

The elements of the condition of a country are either natural or artificial. The natural elements are its geographical position, its climate, its boundaries, its coast-line, the character of its rivers, and the quality of its soil, its mineral, vegetable, or animal productions, and lastly, its population; the artificial elements consist of the civil and political institutions of the people, their agriculture, manufacture, and commerce; their progress in the arts and sciences; their language, literature, religion, and mode of life. The attention of the learners should be directed to all these subjects in turn, as circumstances afford opportunities of entering upon them. They should, especially, be shown how the natural elements of a country, by determining the character and peculiar energies of the people, influence their industrial, social, moral, and intellectual habits.

As an introduction to the first elements of political geography we would recommend the use of a globe containing only the terrestrial and aqueous configuration of the earth, with the national boundaries of the different countries and an indication of their capitals. The child, who has to learn these first notions, can, with this globe, easily attend to them without the confusion which, in using the ordinary maps and globes, arises from the numerous names and lines of rivers with which they are covered, and which are not needed at the outset. But to render this first study more impressive and more interesting, we connect it with another branch of information, which, although most useful

through life, has been totally overlooked in the education of youth. We allude to those emblems which, floating in the breeze, proclaim all over the globe the existence and power of the nations which they represent.

An acquaintance with national flags is indispensable to naval and military men, and useful to all the members of a commercial community; for they serve to distinguish the different nations in their political, military, and commercial relations. The distinctive flags of the numerous ships which crowd our harbours and docks are to him who is acquainted with them the source of much valuable information. They exhibit in one view our commercial intercourse with foreign nations; they lead the mind to an inquiry into the nature of our imports and exports, and hence into an investigation of our agricultural and manufacturing produce.

The child, having been told the names of the nations to which the flags belong, is desired to place these in the capitals of the countries to which they belong, and which are indicated by small holes into which the ends of the flag-staffs are made to fit. It may be easily conceived how amusing and instructive he will find the occupation of planting these standards in their proper places. When they have been distributed all over the globe, the pleasing effect which their variegated colours and their different emblems present to his eye powerfully fixes his attention: he sees at one glance, and in a striking manner, the relative positions of all nations, and their various possessions abroad.

In order to extend still farther the utility of this geographical apparatus, the size of the flags should vary with the degree of political power of each nation, and the length of the staffs with the extent of territory of each country. On the staffs may be inscribed the amount of population of the respective countries, their superficies in square miles, and the names of their capitals. In addition to these fundamental notions, the instructor could, now and then, as any flag engages the attention of his young pupils, associate with it much useful information concerning the people to whom it belongs. He may speak of their mode of government, their customs, national character, and degree of civilisation; of the pursuits in which they are most remarkable, and the discoveries and inventions with which they have benefited humanity; of their standard works, and the advantages to be derived from a knowledge of their language.

With this apparatus, and in the case especially of young persons of the upper ranks, a well-informed teacher may highly

entertain his pupils with interesting narratives relating to the veneration of people for their national flags, the honour attached to their defence, or to the taking of one belonging to an enemy, and the deeds of valour to which both gave rise in ancient and modern wars. A description of the armorial bearings of nations and noble families, which originated in the crusades, and are emblazoned on their different banners and coats of arms, as also an account of the origin of feudal distinctions, and their emblematic mode of transmission to posterity through the devices of heraldry, would excite in high-spirited youths a lively interest in the chivalrous exploits of their ancestors, and in the history of the middle ages: the inquiries might be continued down to modern times, in following the traces of these distinctions still perceptible in the military uniforms of nations and the liveries of private families.

In concluding these suggestions on the mode of introducing young persons to the study of geography, we will extract from an American writer a short and lively description of a lesson on this subject, delivered in his presence by a German professor to an elementary class. We feel the more inclined to do so, as it shows the value of linear drawing in teaching, and presents a new feature in geographical instruction.

"The teacher stood by the black board with the chalk in his hand. After casting his eye over the class to see that all were ready, he struck at the middle of the board. With a rapidity of hand which my eye could hardly follow, he made a series of those short divergent lines, or shadings, employed by map-engravers to represent a chain of mountains. He had scarcely turned an angle, or shot off a spur, when the scholars began to cry out, 'Carpathian Mountains, Hungary, Black Forest Mountains, Wurtemberg,' &c.

"In less than half a minute, the ridge of that grand central elevation, which separates the waters that flow north-west into the German Ocean, from those that flow north into the Baltic, and south-east into the Black Sea, was presented to view, executed almost as beautifully as an engraving. A dozen crinkling strokes, made in the twinkling of an eye, represented the head waters of the great rivers which flow in different directions from that mountainous range; while the children, almost as eager and excited as though they had actually seen the torrents dashing down the mountain sides, cried out 'Danube, Elbe, Vistula, Oder,' &c. The next moment I heard a succession of small

strokes, or taps, so rapid as to be almost indistinguishable, and hardly had my eye time to discern a large number of dots made along the margins of the rivers, when the shout of 'Lintz, Vienna, Prague, Dresden,' &c., struck my ear. At this point in the exercise, the spot which had been occupied on the black board was nearly a circle, of which the starting-point, or place where the teacher first began, was the centre, but now a few additional strokes around the circumference of the incipient continent extended the mountain ranges outwards towards the plain,—the children responding the names of the countries in which they respectively lay. With a few more flourishes the rivers flowed onwards, towards their several terminations, and, by another succession of dots, new cities sprang up along their banks. By this time the children had become as much excited as though they had been present at a world-making. They rose in their seats, they flung out both hands, and their eyes kindled as they cried out the names of the different places, which, under the magic of the teacher's crayon, rose into view. Within ten minutes from the commencement of the lesson, there stood upon the black board a beautiful map of Germany, with its mountains, principal rivers, and cities, the coast of the German Ocean, of the Baltic and the Black Seas, and all so accurately proportioned, that I think only slight errors would have been found, had it been subjected to the test of a scale of miles. A part of this time was taken up in correcting a few mistakes of the pupils—for the teacher's mind seemed to be in his ear as well as in his hand — and, notwithstanding the astonishing celerity of his movements, he detected erroneous answers, and turned round to correct them. The rest of the lesson consisted in questions and answers respecting productions, climate, soil, animals, &c., &c."

"Cómpare," the author adds, "the effects of such a lesson as this, both as to the amount of the knowledge communicated and the vividness, and, of course, the permanence, of the ideas obtained, with a lesson where the scholars look out a few names of places on a lifeless Atlas, but never send their imaginations abroad over the earth, and where the teacher sits listlessly down before them to interrogate them from a book, in which all the questions are printed at full length, to supersede, on his part, all necessity of knowledge."*

* Horace Mann, *Report of an Educational Tour*. See *Quarterly Journal of Education*, Nos. XIII. and XIV., for very judicious strictures on the study of Physical Geography, by G. Long, and of Political Geography, by A. Vieusseux.

4. *History and Chronology.*

Connected with political geography and the subdivisions of the globe is the history of its inhabitants at different periods. Children may be made acquainted with the most celebrated characters of various nations, and the most remarkable events of their history, as particular countries are brought to their notice in the course of the conversation,—the instructor taking care always to associate with the historical fact the time and place at which it occurred. It is particularly from sensible objects, from engravings, pictures, statues, bas-reliefs, and ancient monuments, that they should incidentally receive their first notions of history and chronology. Pictorial illustrations, which so generally accompany the text of modern publications, may easily be procured; they will, from the vividness and permanency of visual impressions, be a useful auxiliary, in fixing historical facts on the memory.

Some regularity, however, may be introduced in this branch of instruction by means of synoptical tables of events and kings, arranged chronologically and synchronically. With one of these tables, a well-informed teacher will be enabled to impart to his pupils a large amount of interesting information on the history of the nation, which is, at the time, the object of their consideration. This instruction should, at first, be purely narrative, the teacher confining himself to memorable events, heroic actions, remarkable sayings, and all those beautiful traits, which, while they interest young persons, tend to elevate their minds, and excite in them a taste for historical studies.

It needs scarcely be observed that children should at first be introduced to the history of their own country in preference to that of any other; their attention should next be directed to sacred history, which, going back to the origin of the world, is the best preparation for the study of ancient history and for the reading of the Holy Scriptures. With those who are destined to receive a classical education, Rome, Greece, and their mythology may be made occasionally subjects of conversation: and, in general, the history of any nation, whose language is being or is to be learned, should be made an object of instruction, either orally or through books, earlier than would otherwise be desirable.

In alluding to dates, the children should be led gradually from the present time, through a series of epochs not very distant from

each other, up to the one referred to. Chronology and history should, in fact, be taught upwards, from the most recent to the most ancient dates, if we wish young learners to form a clear conception of remote eras. They will benefit the more from the past, as they understand better the present, and can compare one with the other (15).

A regular course of historical studies, however, can be pursued only by means of a series of works free at first from any detail of wars and political events, and increasing in minuteness and seriousness of matter progressively with the intellectual advancement of the learners. The information which they will thus acquire will be best retained by making it a subject of conversation with the instructor, or by simply narrating in their own words as much as they can remember. Should any important particulars be forgotten, the teacher may recall them and direct the attention of his pupils to them for a second perusal. In order that they may receive from their historical studies useful lessons of morality and political science, he should accustom them to reflect on the motives of action and the passions of men, on the concatenation of events and their effects on the condition of the people, on the principles of good government, and the causes which produce either the happiness and prosperity, or the misery and ruin of a nation. But this regular course cannot be entered upon at a very early age: this would be more dangerous than profitable. History to a young child would only be a confused collection of facts; for he could not perceive their relations with each other, nor appreciate their causes and consequences: and these facts, being read without discernment, could but impair his understanding. As it records more injustice and bloodshed than virtue and philanthropy, he would thus be early accustomed to depravity. It is best learned after the age of fifteen; until this time, young people may prepare for it by the study of geography and the perusal of voyages and travels.

History is particularly objectionable, as are all purely intellectual pursuits, during the first two periods of youth, because it does not exercise the powers of perception and observation. Those branches of knowledge should be preferred, which are favourable to out-of-door instruction, and which take for their theme the works of the Creation.

5. Excursions into the Country, and visits to Manufactories.

A child may be introduced to the elements of physical knowledge, in his walks in the country, in the garden, or by the water-side. He may be made to observe the hills and valleys, islands and lakes, fields and woods; the immense variety of plants, and the action of light, heat, and rain upon them; the different kinds of soils and the consequent varieties of vegetation; the origin of streams, the direction of the winds, their important office in nature, and their immense benefit to man. The changes which take place from one season to another should not be allowed to pass unnoticed: interesting phenomena occur at every period of the year, in the spring, especially, when the air, earth, and water are teeming with life. Let him watch the progress of the leaves, buds, flowers, fruits, and seeds of plants; let him follow the operations of nature in her various states, and observe the assistance which she receives from agriculture. At other times, let his attention be directed to animated nature: the active scene around him will present new and endless subjects of inquiry; the birds which fly on all sides, the cattle which graze in the meadow, the insects which creep at his feet, or buzz in the air, all will afford inexhaustible sources of most valuable instruction. If his curiosity be judiciously excited and directed, he will watch with deep interest the varied and astonishing instincts by which these infinitely diversified beings sustain their existence, unconsciously but unerringly guided by their bountiful Creator.

Such lessons are peculiarly suited to the inhabitants of the country, who, passing their lives in the presence of nature, may derive continual profit and pleasure from the study of her laws, and the contemplation of her wonders. To a person whose attention has not been duly awakened to the external world, and who has not been early accustomed to observe, all the admirable works of creation are lost, the surface of the earth is a blank. The busy scene of nature passes before an unpractised eye without communicating an idea to the mind, and without kindling the spirit of devout adoration of Him, whose universal love smiles everywhere.

It is but another proof of the harmony of design in all the works of the Creator, that this method of directly cultivating the observing faculty cannot be adequately carried out without

a certain amount of muscular exertion, and of daily exposure to the open air, in collecting and examining the varied objects of interest with which creation abounds. In other words, we cannot benefit the perceptive faculties without, at the same time, benefiting the muscular system and the organs of respiration, circulation, and digestion; and this grand recommendation in the eye of reason—pursuing study in the field of nature instead of in books alone—is actually, though not avowedly, that which retards its adoption in ordinary education. A ramble from the school-room into the country to survey the works of God, is deemed an encouragement to idleness and a love of pleasure; and, therefore, it is denied.*

In rural excursions the sight should be exercised in distinguishing remote objects, and appreciating their number, forms, and dimensions; their distance should be estimated by the eye, and immediately verified by measurement. Short distances may be ascertained by paces, and longer ones by noticing the time consumed in passing over them. Thus, the relation existing between space, time, and motion may be shown in measuring the one by the other. Let the child find out what space can be passed over in a given time, or with a given velocity; what time is required to walk or run, at a certain rate, over a certain distance; what rapidity of motion is requisite to reach a determined point in a given time. Such practices would prove useful in many ways. The estimating of distances at sight, which in some people seems an intuitive act, is merely the result of habit; yet, how few can judge with even tolerable accuracy of the distances at which objects are from each other, and from their own eye! To estimate the angle which objects make at the eye, is another practice of real utility to all men, and to naval and military men in particular.

A country residence is most favourable for pursuing all these exercises. To those who are confined within the precincts of a town we would recommend occasional visits to foundries, factories, and workshops: art, as well as nature, abounds in sources of instruction. In these visits a child would witness the facts which have already been made the subjects of his conversations, and would see the application of the sciences which will subsequently demand his attention. Thus would mechanical and intellectual pursuits assist each other. "What an immense stock of scientific principles," says Dugald Stewart, "lie buried

* See A. Combe's *Elements of Physiology*.

amid the details of manufactures and of arts! We may form an idea of this from an acknowledgment of Mr. Boyle, that he had learned more by frequenting the shops of tradesmen than from all the volumes he had read."*

He whose mind has been early familiarised with the interesting scenes of nature and the wonders of art, will never lose the impressive lessons which they teach. Long after, in the ardour of literary composition, or amidst the excitement of public assemblies, their vivid images will reappear in their pristine lustre to give happy expression to thoughts which shall then be awakened by passing events.

6. *Natural History, Mineralogy, Geology, Botany, Zoology.*

When, by casual consideration of objects, children have been familiarised with a variety of natural substances, the teacher, introducing more order into his lessons, may venture on classifications, and treat methodically of the three kingdoms of nature. This subject will furnish favourable opportunities for making frequent reference to physical geography, with which it is closely associated, by reason of the diversity of organic and inorganic beings, consequent on the difference of climate in various parts of the globe; whilst the practice of distinguishing the characteristic features of these beings, and following the chain which connects them, is highly calculated to improve the perceptive and observant powers, and to create habits of nice discrimination. The amazing variety of interesting objects which natural history offers for consideration, and the admirable adaptation of means to ends which they exhibit, render it the fittest branch of knowledge for exciting in young people a spirit of inquiry, and a sense of the infinite power, wisdom, and goodness of God.

Mineralogy may be made an object of attention in the first stages of instruction. The distinctive qualities of inert matter are more simple and less numerous than those of vegetable and animal substances; they are more distinct and better defined. Minerals, different from plants and animals, can be kept within reach, and exhibited in all their different states. The brilliant colours of gems and metallic ores, as also their crystallisation, a most striking feature of the external character of minerals, are well calculated to excite the curiosity of children

* *Philosophical Essays*, ch. 2.

and to fix their attention. The singular properties of diamonds, gold, quicksilver, and the loadstone, and the great diversity of purposes to which these minerals, and, more especially, silver, copper, lead, and iron, are appropriated, should be offered to their notice, as also the chief attributes of metals—their lustre, sonorousness, tenacity, malleability, ductility, fusibility, specific gravity. The examination of metals will naturally lead to the mention of mines, the modes of working them, the countries where they are found, and the curious processes of metallurgy.

Closely connected with mineralogy is geology, which presents a most interesting field of research; it carries the mind from the consideration of rocks and mines, of mountains and valleys, to the period of their creation, and, by a natural transition, to Him who created them. Geology is, as it were, the earth's autobiography, written in symbolical and unmistakeable language. Young persons should be familiarised with its elements and general outlines as soon as they can comprehend them. They may be told of the composition and arrangement of the materials which form the crust of our globe, of the changes which are continually wrought on its surface by the agency of inundations, earthquakes, volcanoes, and of the admirable contrivances by which it has been rendered, throughout successive ages, capable of supporting countless myriads of organic existences.

The important functions which plants perform in the economy of nature, the arts of civilisation, and the support of life, claim for botany a prominent place in modern education. Few objects in the external world are more interesting than vegetable productions, and, especially, flowers and fruits, whose richness of colouring, as well as endless diversity of hues, forms, fragrance, and flavour, excite admiration for the wonderful display of power and goodness which they proclaim in their Author. The instructor should bring to his pupils' notice the influence of climate and culture on vegetation, the immense variety of plants, their exquisite perfection and universal usefulness; he should explain their structure and the functions of their organs, their mode of nourishment, of propagation, and their growth, the nutritious properties of some and medicinal properties of others. Every botanical fact shows design, and affords matter for serious consideration, such as the natural dissemination of seeds, the successive changes of plants, the invariable direction of roots and branches, the circulation of the sap, the transpiration of the leaves, their happy distribution for the reception of light, air, and water,

the purification of the atmosphere by their absorbent powers, and many other surprising phenomena of the vegetable kingdom.

To make children acquainted with plants, their names and botanical character, the instructor may, at first, place before them only a few of the most familiar species, and gradually introduce to their notice flowers, shrubs, and trees, less common,—passing from indigenous to exotic, with the assistance of pictorial representations. By helping them to examine in what particular each differs from the others—independently, however, at first, of scientific nomenclature—he will enable them soon to distinguish the leading characters of a great number of plants, and will open their minds to endless subjects of admiration in the infinite variety of nature.

Different specimens of timber may also be presented to them, which will further engage their attention in discriminating between the properties of wood, and thence lead to a consideration of its usefulness. There is scarcely a plant of which the whole or some portion is not employed for food, medicine, clothing, or furniture, for distilling, dying, tanning, building, or other useful arts of life. In fact, the innumerable uses to which vegetable as well as mineral substances are applied by man for satisfying his wants or multiplying his enjoyments, may be exhibited in every thing around: such considerations will be an excellent preparation for entering upon the study of the physical sciences.

Zoology will afford endless subjects of familiar conversation, both amusing and instructive. The lively interest which children usually take in animals renders these suitable objects for giving them elementary notions of natural history. The domestic species should, at first, engage their attention, and, afterwards, by means of coloured prints, the most remarkable among those which do not come within daily observation, may be made the subjects of very useful lessons. The fidelity and sagacity of the dog, the docility of the horse, the intelligence of the elephant, the industry of the beaver, the persevering fortitude of the camel, the generous magnanimity of the lion, will supply matter for entertaining narratives, serious reflections, and incentives to further inquiries. The instructor may speak of the varieties of animals differing with the latitudes in which they live, of their external forms and characteristic qualities; of their food, disposition, and instincts, in accordance with their organisation; of the tender solicitude they display for their young; and of the services

which many of them render to man. Particular mention should be made of those which supply his wants or administer to his well-being, during their lives, with their strength, swiftness, and sagacity, their milk and honey, their wool and silk, and, after their death, with their flesh, skin, fur, hair, feathers, bones, horn, ivory, shell, and other useful articles. If the conversation turn upon birds, he may expatiate on their varieties, plumage, migratory instincts, nest-building, power of imitation and melody. These subjects would lead incidentally to the different modes of fowling, hunting, and fishing in various countries.

Fishes and insects should, in their turn, become objects of inquiry; their diversified conformation, their amazing fecundity, and their wonderful adaptation both to the elements in which they move and to their modes of existence, will challenge admiration. The multiplicity of insects, and, especially, of animalcula, is so vast as to baffle the most minute investigation: every plant, every leaf, every drop of water, is the abode of myriads which escape the naked eye, and are visible only by the aid of the microscope. The transformations which some insects undergo, the ingenuity and industry which others display in the structure of their habitations; their diverse ways of procuring food, their instinctive skill in selecting places of safety for the deposition of their eggs, and in providing for the future wants of the young; their contrivances to guard their dwellings from the assaults of enemies, their modes of defence when attacked, their social habits—we may almost say, their municipal regulations and political constitutions—and innumerable other instances of the wise arrangement of a bountiful God, in providing for the preservation and well-being of his creatures, may be opportunely presented to children by a judicious and enlightened instructor.

It is when the young are filled with admiration for the tender care which the Creator has bestowed on his creatures, that benevolent feelings can be most effectively awakened in their hearts; they may be impressed with the idea that the lower animals, having sensations in common with humanity, cruelty to them is a crime. Pity to animals begets charity to men. The seasonable narration of some remarkable trait of the instinct of animals, of some anecdote of their attachment or sagacity, would interest children, call for their sympathies, and, at the same time, inspire them with a wish to inquire further into natural history. Many celebrated philosophers and naturalists have acquired their taste for science from some pleasurable association of their earliest

childhood. Linnæus attributed his love for the study of plants to some observations on a flower which his father made to him when he was about four years of age. The biography of eminent men would furnish multitudes of incidents which have similarly determined in them corresponding peculiarities of character.

7. *Natural Philosophy, Chemistry, Physiology, and Mental Philosophy.*

When the children's attention has been, for some time, engaged in acquiring a knowledge of the external forms and characters of objects, the description of which constitutes natural history, they may be made acquainted with the most curious and most important among the innumerable phenomena of nature, the secret causes of which are unveiled by natural philosophy. They may be led to consider the effects of bodies acting on each other, the laws of gravitation, motion, equilibrium, and the various mechanical powers,—the lever, the pulley, the wedge, the screw, the inclined plane. They should be shown of what immense advantage to civilised man are these mechanical appliances and others, such as wind, water, steam, and the electro-magnetic fluid. The governing laws of mechanics may be illustrated by implements of domestic use,—the poker, scissors, nut-crackers, steelyard, will exhibit various forms of levers; the very playthings of children, —a top, a hoop, a kite, a ball, marbles, soap-bubbles, a sucker, a pop-gun, will exemplify diverse principles of science; no toy is despicable, no occupation is frivolous; which can assist in the elucidation of truth.

The pressure, levels, motion, elasticity, weight, and other properties of fluids, as well as the specific gravity of bodies, may be elicited in a familiar way, by the scientific results which bear more immediately on the occupations of life. Swimming, the floating of vessels, canals, water-mills, the water-press and water-clock, forcing and lifting pumps, the fire-engine, syphon, diving-bell, and many other philosophical contrivances, could be made the subjects of most interesting conversations in illustration of the properties of air and water. In alluding especially to the air, its nature and use in the arts may be further explained, and rendered sensible by means of the windmill, barometer, thermometer, air-pump, bellows, balloons, &c. Air being the medium of sound, its investigations would naturally lead to the consideration of acoustic phenomena, which may be elucidated by the

vibration of bells, the effects of echoes, thunder, gunpowder, whispering-galleries, the speaking-trumpet, wind and string instruments, musical-glasses, &c.

It would be impossible here to enumerate the various familiar modes by which may be illustrated the principles of mechanics, hydrodynamics, pneumatics, electricity, galvanism, magnetism, optics, and astronomy. Books should be consulted by the teacher, both as means of enriching his own mind, and as stores from which he may select such information or such experiments as may be best suited to the understandings of his pupils; but the order in which are usually pursued all serious studies is, by no means, that which he should adopt in communicating the facts, or teaching the language of science to children. His chief object should be, by indulging their taste for variety and taking advantage of circumstances, to inspire them with an earnest love of knowledge. No branch of instruction is better calculated than natural philosophy for exciting and gratifying their curiosity; and, whatever be the way or the order in which they acquire the elements of that science, if they are once conversant with them, everything they read afterwards will find its place. The particular circumstances of time, place, fortune, or social position, in which the learners are placed, will best suggest to a well-informed instructor the department of the science and the modes of illustration which are available or appropriate; but there can be no doubt that, with diagrams and experiments, such as may be found in many popular works on the subject, the elements of natural philosophy may be brought within the comprehension of children under the age of twelve.

With regard to chemistry, the instructor may, as occasion suggests, examine with his pupils the affinity between various substances, their elements, their mutual action, and all attractions and repulsions which form its basis. He should particularly communicate to them information respecting the various bodies and natural elements which are constantly exercising their influence on our condition, and on all things around us, as air, water, steam, gases, light, heat, and electricity; he should explain the nature of bodies in their three states, solid, fluid, and aeriform, their characteristic properties, the laws of composition and decomposition, of evaporation and condensation, of combustion, oxidation, and many other chemical operations of nature or art, which would receive additional interest from experiments introduced for their illustration, or from instances of their application

to the arts of modern civilisation. Dr. David B. Reid has shown that the leading principles of this science may be easily adapted to the most elementary instruction, and rendered accessible to all classes of society, at such a moderate charge as will not prevent those even in the humbler ranks from attending to them.

All investigations of nature, even those of the most elementary kind, will be found of eminent service in developing and training the mind to habits of observation, inquiry, and reflection. They draw attention to natural theology, and are highly calculated to elevate the soul by the admiration which the wonders of creation cannot fail to excite, at the same time that they provide young people with an inexhaustible source of mental enjoyment, and afford them positive advantages for the practical purposes of life. This is particularly the case with chemistry, the application of which is so universal and so immediately connected with the arts and all the wants of man. "In this new magic," says Cuvier, "the chemist has only to wish: everything can be changed into anything, and any thing can be extracted from every thing." * The minds of young persons will be opened to a train of thinking, which, in some, may lead to most important results, if they are occasionally shown by experiments that the infinite varieties of the material world are only different compounds of a few elements.

The thoughts of children may also be directed to their bodily frames, which present all the considerations of colour, form, dimension, properties, uses, &c., belonging to matter. The teacher may explain the functions of the sensitive, the vocal, and the muscular organs, the utility of which can be made obvious to the youngest child; he may, as an example of that admirable adaptation to each other of all the parts of the animal economy in man, show them how beautiful is the mechanism of the hand, how wonderfully calculated it is to execute the commands of the human mind. They will thus be impressed with a consciousness of the infinite wisdom of Him who, in making man superior to all other animals by his intellectual powers, has given him the instrument with which he can exercise his sovereignty over the Creation.

From a consideration of the external organs he may pass to that of the internal; he may examine with his pupils the functions of the stomach, the lungs, the heart, and the brain; the structure of the bones; the manner in which the different joints, muscles, nerves, and vessels perform their office; their

* *Réflexions sur les Sciences.*

mutual subserviency and happy adaptation to the preservation, strength, motion of the body, in fact to the whole constitution of man. Few subjects are more easily taught orally than physiology and anatomy. The presence of the living body precludes, to a great extent, the necessity of written descriptions, of preparations, models, or skeletons. With instruction on this subject should be combined explanations of the great hygienic principles, the observance of which is indispensable. Young persons should be made acquainted with the constitution of the atmosphere, and with the relation of its elements to the functions of respiration and to the composition of the blood: they should be shown the influence of exercise on the muscles and bones, on digestion and circulation. They will be less tempted to violate the physical laws of their nature, when they are aware of the consequences of the violation. They will better guard against accident or disease, when they know in what manner the human constitution is influenced by air, food, exercise, and moral causes. Every parent is bound to give to his children that information on which their future existence and well-being so greatly depend. A knowledge of physiology more universally diffused would be a check on medical quackery.

The close dependence and analogy which exist between the functions of the physical and those of the mental faculties, will render inquiries about the latter both easy and interesting. There is nothing, for example, in our introductory Book which may not be made as plain to children twelve or thirteen years old, as any other subject of inquiry to which we have adverted. The study of the mind as well as that of the body, is founded on familiar facts placed within his powers of observation and discrimination. He can early be made to consider the different states and actions of his own mind, and to discriminate between attention and reflection, memory and imagination, judgment and reasoning. He may be made to observe what passes within himself when he receives perceptions, when he associates ideas, when he compares and draws conclusions, when he has desires and contracts habits. He can be shown when he applies properly or otherwise his moral and intellectual faculties. He will thus acquire a knowledge of himself and a habit of self-examination, which will teach him how to use his faculties to the greatest advantage; at the same time that it will make him feel his dignity as an intellectual being and as a

creature destined to immortality. But "the great advantage which he will derive from inquiry into the laws of his own mind, is much less in the addition which it gives to his own power or wisdom, than in the evidence which it affords him of the wisdom with which his constitution is framed, and the magnificent purposes for which it is framed."*.

SECT. IV.—MODE OF IMPARTING SCIENTIFIC INFORMATION TO CHILDREN.

The younger the children are the less methodical ought to be the course of instruction. They must not, at first, dwell long on particulars, or investigate any subject profoundly. It is enough that their judgments be exercised incidentally and in a playful manner. Formality and gravity must be avoided, not to create dislike. The conversations should be enlivened by cheerfulness, and the subject illustrated by familiar and amusing experiments. Such illustrations will foster a taste for scientific pursuits more effectually than dry dissertations.

The teacher must take care not to measure his pupils' capacity by his own; he should not cram them with truths beyond the feeble grasp of their intellect, nor force on them abstract principles of science. He should chiefly dwell on facts, and especially on those which can be ascertained by the perceptive faculties. The simplest and most obvious qualities should, alone, in the first instance, be presented to their notice; and, by a succession of observations and experiments, as they become capable of deeper investigation, they may be led to discover the most hidden properties, even those which are cognisable only by chemical analysis. To accomplish this object, the practical instruction unfolded in this chapter should be carried on beyond the age of twelve and conjointly with classical education. It will, in the third period of youth, assume the form of regular scientific courses and discussions on the higher departments of knowledge. The instructor may then occasionally deliver short and interesting lectures, with a view to investigate more fully some of the subjects touched upon in the conversations. The sort of information which bears more immediately on the future position of the learner may thus be pursued in connection with a proper course of reading.

* A. Alison: *Essays on the Nature and Principles of Taste.*

As the pupils advance in mental power, the instructor should make occasional excursions on philosophical and scientific ground, in order to excite in them a taste for such studies as they are afterwards seriously to pursue. Yet, it must not be forgotten that little more than elementary instruction can be imparted to children under twelve years of age; and nothing more is wanted until the third period. All those who have made some advance in knowledge will readily admit that, in every branch, elementary principles alone are required to be taught: beyond this, reading, study, and observation may, without the assistance of teachers, carry a learner to the highest departments of science.

But although a child is not to be made a scholar or a philosopher before his time, he should be encouraged to investigate subjects for himself and to draw his own conclusions; he should be accustomed to direct his attention to serious matters, and his mind should be gradually prepared for abstract reasoning. If he begins by learning philosophy in sport, he must not, as Walter Scott aptly expresses it, make sport of philosophy. He should be early made conscious that, to follow the paths of knowledge with advantage, persevering and laborious effort must be made; for, in general, nothing worth learning is attainable without trouble. To minds properly trained, the overcoming of difficulties, consequent on earnest application, is a pleasure at any period of life. Observation and reflection, concentrated for a long time on one study, produce more beneficial effects than the capricious and versatile impulses of genius. Newton, James Watt, Buffon, Cuvier, and all those who have accomplished important objects in science or art, owed their success chiefly to patient investigation, undeviatingly directed to one great end.

Many persons, who, in their youth, have not gone through this mental discipline, shrink in the maturity of age from entering upon the study of any branch of information which it might be desirable for them to possess. Others, who have been more accustomed to depend for information on their books and masters than on themselves, are often incapable of advancing one step beyond what they have been taught. "I am persuaded," says Descartes, "that, if I had been taught in my youth all the truths, the demonstrations of which I have since sought, and if I had not had some trouble in learning them, I should perhaps never have acquired the habit and facility which, I think, I have, in finding new ones, in proportion as I apply myself to

the discovery."* No branch of knowledge, however difficult to be attained, is beyond the reach of those who feel conscious of their own capability and independence. It is the business of early education to beget this consciousness.

SECT. V.—ON INCULCATING NOTIONS OF TASTE, ORDER, AND PIETY.

The minds of the young require to be refined as well as informed; the instructor ought then to cultivate their taste, by frequently turning their attention to the many circumstances which concur in producing the beautiful, either in nature or in art. With this view, fitness and utility of things, symmetry and variety of forms, proportion and relation of parts, contrast and blending of colours, grace and regularity of motion, grandeur and unity of design, must be successively examined in objects which excite pleasure or admiration. The latter feeling is a powerful means of education; and, to produce it in children, every opportunity should be seized to give them a consciousness of all that is grand and beautiful. The verdant field, the shady grove, the towering mountain, the variegated landscape, the boundless ocean, the starry firmament, the rising and setting sun, and all other enchanting and sublime scenes of nature should be frequently offered to their contemplation; early associations evolved from such perceptions and from the trains of ideas to which they lead, will be the source of intellectual pleasures in maturity, and the foundation of good taste in the fine arts. Painting, statuary, poetry, and all descriptive or imaginative compositions, owe their choicest beauties to the study and contemplation of nature.

"While a taste for the beauty and sublimity of nature opens to the years of youth a source of pure and of permanent enjoyment, it has consequences on the character and happiness of future life, which they are unable to foresee. It is to identify them with the happiness of that nature to which they belong; to give them an interest in every species of being which surrounds them, and, amid the hours of curiosity and delight, to awaken those latent feelings of benevolence and sympathy, from which all the moral and intellectual greatness of man finally arises. It is to lay the foundation of an early and of a manly piety,

* *Discours sur la Méthode.*

and to make them look upon the universe which they inhabit, not as the abode only of human cares or human joys, but as the temple of the Living God, in which praise is due, and where service is to be performed."*

Although the works of art yield in magnificence and perfection to those of nature, they must not be overlooked. Engravings, paintings, statues, monuments, ruins, everything which speaks to the eye and imagination, should be brought before the notice of young persons, as eminently conducive to the cultivation of taste. Thus will they gradually acquire the power of enjoying and admiring the master-pieces of art, as well as the wonders of creation; hence, also, will they become capable of appreciating the merits of the splendid and vivid descriptions which characterise the works of great writers, ancient and modern, who have been the most faithful interpreters of nature.

Habits of order will especially be conducive to the cultivation of taste; for order is essential to beauty. Children should be accustomed to do everything at the proper time, to put everything in its proper place, to observe regularity in all they do, and to notice it wherever it exists. They should be made to perceive the analogies between things, the links in the succession of events, and the periodical return of natural phenomena. Order has a most powerful and beneficial influence on all the operations of the human mind; it fixes attention, assists memory, regulates imagination, and rectifies judgment: it is the torch of reason.

By an easy transition, children may be shown how wisely the Author of all things has ordered the most minute details of the creation; how beneficially he has adapted the nature and habits of man, the conformation and instincts of animals, to the climate and productions of the country in which they are intended to live. Thus the perfect order which reigns throughout the universe, and the wonderful adaptation of everything to the use for which it is intended by the Almighty, will become constant objects of their contemplation. Every evidence of wise and beneficent design will render the facts more interesting, will exercise reason and excite admiration. There is no created thing, no operation in nature, which is not calculated to raise our souls towards heaven, and to teach a lesson of piety and virtue. A child should be constantly led "to look through nature up to nature's God;" and as he investigates more

* A. Alison: *Essays on the Nature and Principles of Taste.*

minutely the properties and uses of things, he will gradually be penetrated with a full conviction of the order, harmony, and beauty of the universe; and his heart will be filled with gratitude, love, and veneration for its Author. Every opportunity should be seized to impress sentiments of this nature on his mind: when they have become habitual they will furnish the best security for future good conduct.

This will present no difficulty; for everything proclaims the existence of God; "it is written in flaming letters on the canopy of the heavens, and in brilliant colours on the wings of the butterfly." With any object before their eyes, children may be induced to observe and reflect on the superiority of the productions of nature over those of art; their attention will easily turn from the human manufacturer to the divine Creator; they will see the imperfection which marks every work of man, to whom all the materials are furnished, in comparison with the inimitable perfection which shines in all that God has made, and will be struck by the narrow selfishness of art, compared with the universal benevolence which breathes throughout nature. Thus deeply impressed with a sense of the power, wisdom, and goodness of the Creator, their hearts will early open to sentiments of pious admiration of His works. With a little tact an instructor may, from the least incident, from the most trifling object, illustrate some of the laws of nature, and draw from them moral and religious truths. The better to accomplish this important part of his duty, he ought to make nature his particular study, and to enrich his mind with the thoughts of the standard writers on natural theology. (16.)

SECT. VI.—EDUCATIONAL APPARATUS—SPECIMENS, MODELS, ENGRAVINGS, AND PAINTINGS.

In imparting the elements of knowledge to which we have adverted, the instructor should take care that the technical terms which he occasionally introduces convey to the minds of his pupils clear ideas of the things which they represent. For this purpose he must, conformably to a principle already laid down, submit those things to their perceptive powers before he makes them acquainted with the words by which they are expressed. This will be the more methodically and the more completely effected, if the instructor be provided with various

collections of objects, which may always be brought in illustration of the facts mentioned. He should, above all, have specimens of mineral, vegetable, and animal substances, classified and arranged in series indicating their genus and species, as also collections of manufactured articles, exhibiting the various modifications effected by art on natural productions. Children should be encouraged to make such collections; they would thereby acquire much valuable information, with habits of order, classification, and useful inquiry.

In addition to these objects and to those mentioned in preceding sections, the educational apparatus should contain instruments of natural philosophy, which come in aid of the physical faculties, and would enable the learners to witness or perform a great number of interesting and instructive experiments. (17.)

As the opportunity cannot always be afforded to children of examining the objects, or witnessing the facts, which may incidentally become the subjects of conversation, the deficiency may, in great part, be supplied by models, pictures, engravings, or coloured prints, which will complete the educational apparatus. If the class be numerous, the instructor should have near him a black board, on which to sketch or write such things as demand visible illustrations. Descriptions of things and definitions of terms should be introduced only as a last resource; for the ideas acquired without the direct intervention of the external senses are much less vivid and less precise than those which are received through their operation. There are many things in nature, in the sciences, and in the arts, which it would be difficult to describe, and of which the representation would give a perfect idea.

Pictorial illustrations may be used most efficiently as substitutes for objects. They are intelligible at a very early period in life, long before books can be understood; particularly when children have been, as already recommended, exercised in sketching familiar objects from nature,—a favourite occupation with them.

But whatever visible representations are placed before a child, they should be faithful delineations of the things themselves, otherwise his imagination would be misled, and his judgment perverted, by the false notions he would form of those things, if they could not be submitted to his perceptive powers. Caricatures, especially such as may create prejudice against any class of

people, and all books which display bad feelings against other nations, should be sedulously kept from his sight. Educational works, of all others, should be free from unchristian sentiments against our fellow-creatures. Those who write for youth will have much to answer for, if, by misstatement or exaggeration, they nurture in the mind of the rising generation anti-national feelings of rancour and enmity.

The forms and comparative sizes of the objects represented should be correct, and rendered clear to children by appropriate explanations. They should be made to notice the relative proportions of the different parts of the picture, as well as the effects produced by perspective and by light and shade. In this manner not only will their eyes be made more accurate and their taste be cultivated, but they will be prepared for a clear comprehension of the diagrams and sketches which are indispensable accompaniments to treatises on the arts and sciences.

Pictures and engravings are a never-failing source of pleasure; and not only will they materially contribute to enliven instruction and beguile the hours, but they will indefinitely extend the horizon of young people's observation. They will bring within their mental grasp whatever in nature or in art is worthy of consideration,—plants and animals of every climate, costumes and manners of different nations and of different epochs, implements of art and weapons of war, remarkable monuments and places, eminent men of ancient and modern times; in short, innumerable things of which the realities are, at the time, inaccessible to them. When they afterwards see objects, the representations of which are familiar to them, they will observe them with much more attention and eagerness than they would otherwise have done. Visits to cabinets of natural history, museums of curiosities, repositories of arts, and galleries of paintings, would thus be rendered exceedingly interesting and profitable.

In this respect, France is a pattern to other nations; she offers to her youth advantages not to be procured any where else. Her capital teems, through all its public squares and gardens, with specimens of the fine arts, which, by early familiarising the people with beautiful models of statuary and architecture, cultivate their taste and elevate their minds. Her rich and numerous collections are open to all those who seek for knowledge, or intellectual gratification. But, of all her public institutions, the most remarkable, perhaps, is the Musée

de Versailles. At the same time that the taste of the beholder is cultivated by the beautiful specimens of the French school which it contains, the national history is learned in the most interesting and impressive manner. These eloquent annals of the glorious deeds of France, speaking to the eye and imagination of our youth, must kindle in their hearts a noble pride and an ardent desire to serve their country and to imitate their ancestors. This national museum is indeed worthy of a great nation. To complete the benefits expected from it nothing is now wanted but to attach to it eminent historiographers and professors of French history. Their lessons, in the presence of these animating illustrations, would possess a new interest, and would impress the facts most vividly on the minds of their auditory.

Louis-Philippe, when as yet faithful to the liberal principle which had raised him to the throne, was aware of the importance of this historical monument with respect to instruction; and, being then as anxious to promote the national education of the people as to immortalise "all the glories of France," he gave, on opening it, a noble example to parents and instructors. He himself, conducted through its vast and splendid galleries, the pupils of the colleges of Paris, to whom he addressed these memorable words, "My children, in forming this museum, I wished to prove that France has accomplished things as great as those republics of Rome, Athens, and Sparta, with which your attention is too much occupied." We quote these patriotic words the more readily as they forcibly illustrate the opinion which we have expressed on the length and exclusiveness of classical studies.

SECT. VII.—TECHNICAL, SCIENTIFIC, AND ABSTRACT TERMS.

In presenting to the consideration of children objects or facts, experiments or engravings, everything should be called by its technical name: thus will they be early accustomed to the language of science, and the better prepared to enter afterwards upon serious studies, and derive benefit from public lectures. Scientific terms initiate us, in fact, into the sciences of which they constitute the nomenclature. Being more precise in their signification than common terms, they leave on the mind ideas more definite; they are employed in a sense rigorously limited

and always identically the same, whereas common terms, having grown up in the mind from a thousand diverse suggestions, present much vagueness and obscurity in their application. Scientific words will be as easily retained as any others, if they be frequently used as the signs of the ideas which they represent. The specific words, *curve*, *circular*, and *spherical*, for example, which qualify, the first, a line, the second, a surface, and the third, a solid, are more definite, and, in many instances, more correct than the vague familiar generic word round, which applies indifferently to lines, surfaces, and solids. Those who converse with children can greatly facilitate to them the acquisition of scientific, as of all technical expressions. But, at the same time, they should keep in mind that it is often desirable to express the results of science without the ostentation of its terms.

Scientific words should, when first introduced, be accompanied by some development or periphrasis in simple language, to explain and fix them on the memory by the force of association. The familiar illustration of a technical expression will not only make it more intelligible, but the advantage of knowing it will be rendered sensible to children, as they will perceive that it expresses very briefly and precisely what, in familiar words, would demand much circumlocution. However, the frequent application of the same technical term in different circumstances will render it quite clear and familiar: they need not, at first, be required to define the technical word; it is enough to furnish them with frequent opportunities of using it appropriately.

The art of defining presents great difficulty from the conciseness and precision required; and, as it proposes to characterise things by their essential properties, it often involves considerations entering deeply into the nature of the things denoted by the words to be defined. Definitions are to words what descriptions are to things; the former is an exercise in reflection, as the latter is in observation: in the order of studies, exercises in observation should precede those in reflection. At a more advanced age, defining words and paraphrasing sentences will improve the power of speech of young persons, by enabling them to ascertain the precise meaning of words, and the different ways of expressing the same idea.

The preceptor should employ every means in his power to guard his pupils against using obscure terms, or words without definite ideas attached to them. To this effect, objects and facts must not be brought under their notice in very rapid

succession. The introduction of a new expression should be preceded by the perception of the thing signified, or the illustration of the fact which it serves to designate. They should, as it were, be made to feel a want of it. The expression will then serve as it ought, both to retain the impression and to recall it as occasion requires. By this means, also, their knowledge of words will keep pace with their ideas. Some people have more words than ideas; others, more ideas than words. Of these two evils the second is the smaller; for we only find it an inconvenience not to be able adequately to express all our thoughts; but we render ourselves ridiculous by misapplying words for want of knowing their corresponding ideas.

In order that young persons may acquire habits of perspicuity and accuracy in the use of words, the instructor must avoid using terms of vague import; and when he employs such as have different significations, which may often happen with abstract and metaphysical expressions, he must take care that they are understood by his pupils in the sense which he attaches to them. If, for example, the word *abstraction* be introduced, he must make it clear to them whether he uses this word for the so-called faculty of the mind, the action of that faculty, or the result of that action; for it admits of these three acceptations. Equivocal expressions lead to confusion of thought and false reasoning: sophistry consists, for the most part, in using a word in one sense in the premiss, and in another sense in the conclusion. But it is not, at first, by definitions that such expressions can be explained; pure abstractions are unintelligible to young children. The meaning of an abstract term should arise from the context and from the incidents of conversation. Any one property common to several objects will, by the consideration of the abstract idea thus presented, easily lead to the comprehension of abstract words. As most metaphorical terms are derived from words expressive of sensible things, young people may occasionally be shown the analogy which exists between abstract or metaphysical ideas and those which may be called sensible.

When a child knows how to read, his attention must be sometimes directed to the written expressions, and not only should the errors he commits respecting the propriety of terms, or perspicuity of language, be corrected, but the principles of grammar which are violated should be stated. If, at the time he hears new words, their nature, origin, and composition be

explained, and if, by proper illustration, their functions and different acceptations be shown as well as their places in sentences, he will not only know and recollect them better, he will also be initiated into the first principles of grammar and composition. We will, in the following chapter, advert to the mode of imparting elementary notions of grammar.

SECT. VIII.—RECAPITULATIONS, DESCRIPTIONS, NARRATIONS, COMPOSITIONS, AND LETTER-WRITING.

The necessities of our communicative dispositions and the present state of society, demand that the conceptive, imaginative, and recollective powers be early trained to the oral and written expression of thought. Children should, therefore, frequently avail themselves of their newly acquired words and ideas, to incorporate them into extempore discourse: when the mind is full of a subject, the tongue will readily give expression to it. They ought to be made, at the end of each lesson, to recapitulate what has just been said; or, the object being removed from their sight, they may be desired to describe it minutely. This will stimulate their attention during the lesson, and will impress better on their minds the facts and expressions which have been elicited by a minute examination of an object: we are not sure of understanding a thing until we can clearly convey our conception of it to another person. But, to render this practice truly effective in improving the understanding and language of children, the instructor should always insist on precision of expression and accuracy of description; for the act of accurately recalling the ideas which things suggest cultivates conception, reflection, and recollection, as the act of minutely observing these things cultivates attention, perception, and retention. At a more advanced period, these recapitulations may be made by the learners the day after the conversation. They will, at all times, enable the instructor to ascertain how much his pupils have retained of the knowledge communicated to them, and whether they understand it perfectly.

If the conversations are continued after children know how to write, they may be made the subjects of essays. These should begin with the description of simple objects, stating their parts, colours, forms, substances, and dimensions, then their properties, qualities, uses, origin, mode of fabrication, &c., following, in short,

the gradation which has been indicated in the foregoing course of conversational instruction; the narration of simple facts and daily occurrences would be the next step; and, at a later period, rural excursions and visits to manufactories would afford abundant materials for exercising their narrative and descriptive powers. The narrating of short and interesting anecdotes which they have read or heard, and brief accounts of historical events, would also forward this object; it would present the double advantage of a dictation and a composition; would turn their attention to ideas as well as to words; would exercise their memory and imagination. From such narrations and descriptions they would, by degrees, venture upon observations and reflections of their own which would give to their compositions all the character of original essays.

The great obstacle which young people encounter in the writing of essays is the want of ideas. "*I do not know what to say*," is their invariable answer, when desired to write a composition, or a letter to some relative. This cause of complaint would be effectually removed by conversations on objects; for, in these, their observant and recollective powers are aroused by questions and suggestions; they are impressed with clear notions which form in their minds connected subjects on which they have, as it were, only to report. If they have heard and expressed just ideas on any one topic, they will find little difficulty in writing their conversation. The reading and criticising of these compositions will, afterwards, afford to the instructor the means of correcting misconceptions, as well as errors of language.

These oral and written summaries, by habituating young persons to analyse, arrange, and express their ideas, will teach them to think, to speak, and to write,—a threefold object easily attained by the disciple of the course recommended. "When one knows how to think," says Condillac, "nothing more remains, in order to speak and write well, than to speak as one thinks, and to write as one speaks." *

Letter-writing, so extremely useful through life, having, by the reduction of postage, received considerable encouragement and a new degree of importance, demands more imperatively than ever to be early rendered familiar and easy. Young persons should be required to adopt occasionally for their compositions the epistolary form and style. Whether they reside or not under the same roof with their parents, they should write to

* *Cours d'Etude. Discours préliminaire.*

them weekly a letter, in which they might give an account of their occupations, and, especially, of their studies during the week, passing from light to serious subjects as they advance in age and knowledge. They may, in these periodical reports, advert to the nature of the books they are reading, express an opinion on their contents, and state the most striking passages in them; they may tell what progress they are making, and what information they add weekly to their stock. By perseverance in this practice, children will acquire a facility in the expression of thought, and will form habits of unreserved and affectionate correspondence with their parents; while the parents will be afforded an opportunity to judge of the progressive acquirements of their children in all the departments of instruction. From not having been early accustomed to epistolary composition, many persons, well informed in other respects, have preserved through life an invincible dislike to letter-writing, and have, by their neglect or procrastination, tortured the feelings of a fond parent, severed the endearing ties of friendship, or otherwise materially injured their best interests. The fate of life often depends on the writing of a letter.

SECT. IX.—GENERAL DIRECTIONS FOR IMPROVING THE LANGUAGE AND UNDERSTANDING OF CHILDREN.

In order to complete the present practical lessons and ensure their efficiency in improving the language and the understanding of young people, we will here adduce a few general directions.

Children should be encouraged to state not only what they know, but what they can discover; they should indirectly be made to feel a wish for any information they require; they should be allowed frequent opportunities of asking questions and unfolding their own ideas; they should be desired to account for facts, to state the causes of the effects which they witness, and *vice versâ*. They should be induced to observe particulars, and from these to frame general laws, which may again be applied to the explanation of particulars: such is the groundwork of all philosophical investigations.

Their inventive powers should be set to work in discovering and stating some of the laws of nature, in describing processes of fabrication, and finding out the elements of compound bodies, in enumerating all the properties of an object and mentioning

the different modes of applying it to some useful purpose. They may also have various questions proposed to them in the form of problems, such as, to indicate several things similar in one or more points; to find out resemblances, differences, and contrasts between any two objects; to name things which possess in common any given property, and others which have peculiar and distinct properties; to state to what class or species any individual mineral, plant, or animal, belongs; to judge by their senses alone of distances in length, in height, or in depth; of the dimensions, weights, and capacities of things; of the magnitude of angles, of the length, perpendicularity, and parallelism of lines; to divide a given line or surface into any number of parts; to measure the height of a tree or building by the shadow; finally, to solve easy problems in geometry and mental calculation, the latter especially, which may be practised indefinitely and can be adapted to every age. These trials of skill may be rendered objects of playful competition between several children without danger of exciting injurious feelings.

It is when their attention is most excited, that they should be asked to account for facts, to make discoveries, or to solve problems. A few data would then enable them to search for and arrive at the unknown truths. But it is only at an advanced period of the course that they should be made to depend entirely on their own mental resources: they must have previously exercised their attention and gained information, by listening to their teacher; they must have enlarged their powers of observation and language, by examining objects and describing what they have noticed in them, before they can be expected to enter successfully into serious investigations.

As one of the chief objects of these lessons is to acquire a command of words, young people should not be allowed to answer in monosyllables; or rather, questions should be put to them so as to require more than a mere word of assent or dissent. A single *yes*, or *no*, often proceeds from a want of due consideration of the subject. Let them be encouraged to express their doubts freely on every subject, and the debates arising therefrom will be most profitable, provided the confidence and vivacity with which they are carried on be tempered by modesty and courtesy; they will remove that awkward diffidence which, when not early counteracted, often proves an obstacle to success in after-life. They must also be guarded against a spirit of argumentation. The exercise of faith should precede the

conviction of reason: there are many qualities and phenomena, both in the material and the spiritual world, whose existence is certain, although their cause is occult. The habit of admitting only what has been demonstrated, is prejudicial to the acquisition of solid and extensive knowledge, especially at a time when the judgment is as yet feeble and incomplete, since man, in the full vigour of his intellect, is himself often obliged humbly to submit to many truths which his reason cannot apprehend.

In training young persons to the exercise of their reason and to the expression of their thoughts, no question should be put to them for the solution of which they have not sufficient data; nor should they be asked the same thing to weariness. In the first case, they are discouraged; in the second, they are wearied; in either case, time is lost and the object is frustrated. Questions are put to a child, in order to ascertain if he understands what has been explained, or to lead him, by a series of inductive facts with which he is acquainted, to those which are unknown; beyond that, he should not be teased with catechising. Children dislike cross-examination as much as adults.

The instructor must not forget that, if the business of children is to acquire knowledge and find out truth, his own consists in imparting it, or assisting them in the discovery. In giving them the benefit of his own experience, he must be sure that he has communicated sufficient information to put them in possession of the clue that may lead them to the facts the discovery of which is proposed to them. He must refrain from saying too much, lest his pupils should acquire habits of indolence and thus neglect the exercise of their own faculties: besides, it is injurious to overload the memory of young people and to surfeit them with any species of knowledge. Nor should the conversation be allowed to wander too frequently or too far from the main subject of the lesson; it should not degenerate into vague talk, or be engrossed by a consideration of trifling matters, or of those familiar notions which intrude themselves on the senses, and the knowledge of which is infallibly gained in the natural course of ordinary life. A judicious instructor will know how to avoid empty minutiæ, when to check the idle questions of his pupils, and how far to pursue an investigation; he will convey instruction at the time and in the manner in which it is most likely to interest and to make vivid and lasting impressions.

It may sometimes happen that the instructor will be at a loss how to explain certain facts, or answer questions proposed by a child; he may also commit mistakes, either from not having previously given his attention to the subjects incidentally introduced, or from some erroneous notions imbibed in the early period of his life. Whatever may be the cause of his deficiency or of his error, he should never hesitate to acknowledge it: he will thus set his pupils an example of candour and modesty. If, by never confessing ignorance, he seems to assume universal knowledge, his pupils will despise him the very first time they find him in error. He should join in efforts with them to discover the truth which is the object of their investigation; and when his own resources fail him, an encyclopedia or work of general knowledge, which should always be at hand, will, in most cases, supply his deficiency. The emulation thus generated between the teacher and the learners, will have the happiest effect on the moral character of the latter. Let no false shame prevail on him to attempt an explanation, when he does not feel conscious that he possesses a thorough knowledge of the subject which the accidental transitions of conversation may bring under consideration.

If a young inquirer asks, "Why can we see through water?" he is not unfrequently answered, "Because it is *transparent*" (that is, because it can be seen through); and thus he is given the name of a property for an explanation of a phenomenon; he is taught to take words for ideas. Ignorance in a child is far preferable to false notions, as scarcity of food is preferable to poison. He who has not obtained the information he required, is conscious of his ignorance, and may yet be enlightened; but he who has been badly taught, and is unconscious of his error, is likely to remain ignorant.

Whenever the instructor has exhausted his information on a subject, or feels unable to answer the inquiries of his pupils, he may, instead of leading them astray, take advantage of the circumstance to inspire them with a taste for reading. This he will do, if he apply to the book which contains the desired information and read it to them; for these occasional readings will tend to foster in children a conviction of the importance of books, and will show them where and how they can, at a future period, obtain the information they require. In any case, let him often refer them to books as the sources from which they can always derive most valuable and complete information. "Read and you

will know," was a direction often addressed to Sir William Jones, when a child, by his mother; and to the observance of this maxim this great linguist acknowledges himself indebted for his subsequent attainments.* "A love of reading is the greatest blessing education can bestow."†

These familiar conversations furnish many opportunities of discovering what is the pursuit or vocation for which children have most taste or aptitude. The constant and unrestrained intercourse which they establish between them and the preceptor will afford him the means of discerning the peculiar character of each, and of exercising for its proper direction an influence the more powerful, as it will be unperceived. But we need not enter into further detail on this point; for it would be impossible to specify any regular or general course to be followed. There can be no method but that of perpetual self-adaptation to the ever-varying moral and intellectual circumstances of pupils and teachers. The nature of the instruction changes with the age and disposition, as well as with the social position and the intended avocation of the learners. It is also considerably modified by the habits and favourite studies of the instructor: his mind, his heart, his manner, his language and information will exercise an irresistible influence.

He who loves children will always keep up these conversations in the manner that will be most interesting, and consequently most profitable to them. For this reason, a parent who can daily devote some moments to this exercise, would be the most likely to succeed. There are few parents, whatever be their social position, who could not greatly improve their children by giving them the benefit of their own experience: no one can be at a loss for information to be conveyed to such inexperienced minds. Whoever undertakes these conversations will soon perceive that materials continually accumulate, and that many objects are rich in the means of instruction, which, at first sight, appeared to be barren or inexplicable.

The humblest individual may, if he only have a correct judgment, undertake these lessons on objects. However, a person of highly cultivated mind would have greatly the advantage; but, he should in the beginning lay aside the loftiness of thought and range of language to which he has been accustomed. He should condescend to become a child again, at the same time

* *Memoirs of his Life*, by Lord Teignmouth.
† Mrs. Child. *The Mother's Book.*

that he avails himself of all the useful knowledge which he possesses for the benefit of his young hearers. He should communicate information in an earnest, impressive, and attractive manner, so as to command their attention. He should rouse their curiosity by the recital of the marvellous, and occasionally raise their imagination by the poetical. He should withal be of a pious frame of mind, so as to connect religious and moral impressions with his instruction.

The well-informed and judicious preceptor, who sincerely desires to secure to his pupils the end proposed from these conversations, and who possesses the invaluable talent of adapting his manner, his language, and his instruction to the age and dispositions of his pupils, will not fail to interest them. The natural curiosity of children will become in his hands a powerful instrument by which to rivet their attention; and he will exercise over their physical, moral, and intellectual faculties an influence which he can, at will, turn to their improvement in every department of education.

From these remarks, it is obvious, that, if parents themselves cannot fulfil the intentions of nature, by imparting to their own children the first principles of education, they cannot be too careful in the choice of the person under whose direction they place them. When the young are to be taught the first notions of morality, the elements of knowledge, the import of words, and the use of language, then a moral, skilful, and accomplished preceptor is indispensable. The false notions and bad habits, which, under an incompetent person, they would be likely to acquire, could hardly be got rid of through life. Their great task, afterwards, would be not so much to learn as to unlearn; and, perhaps, they would for ever have to lament the vague ideas which they, at first, attached to expressions, the incorrect associations which they formed, the confused mode of thinking which they adopted, and the unmeaning or vulgar phraseology which they acquired.

SECT. X.—BENEFITS AND IMPORTANCE OF THIS COURSE OF ELEMENTARY INSTRUCTION.

These conversations are admirably calculated for inuring the young to mental labour, and preparing them for future exertion in every walk of science and literature. There is not a subject

which could not, by easy transition, be entered upon, no information which could not be introduced. Things the most familiar, circumstances the most trivial, may give rise to instructive and interesting observations, and to the highest contemplations. Any object in the house, in the street, or in the fields, a toy, anything which is within reach, or within view, all that nature has produced, or art has modified, can be made a subject of reflection. The humblest as well as the noblest objects in creation, may furnish inexhaustible topics of conversation, and lead, by a contemplation of the works of the Creator, to the manifestation of His infinite power, wisdom, and goodness. With so many subjects capable of exciting the curiosity of children, of captivating their attention, unfolding their faculties, and enriching their minds, how can people hurry them into Latin for want of more suitable employment.

The abundance of matter in these lessons always affords the means of making instruction interesting to young people. Every new object which is submitted to their examination becomes valuable, not only because it exercises the mind and gives positive information, but also because the facts to which it leads are necessarily connected in their minds with similar facts previously ascertained. The more numerous the facts which children collect, the more will their judgment be rectified and invigorated, and the more clear and extensive will be their knowledge of words.

When the information which is usually gained from experience is abandoned to nature and to chance, error mixes itself with truth: a random observation leads to imperfect notions and false conclusions. It is the privilege of the foregoing practical course to obviate such evils. Under the direction of an enlightened parent, or of a properly qualified instructor, it will be productive of many advantages: the lessons may be light or serious, short or long, according to the age, capacity, and previous knowledge of those to whom they are given. They furnish means both for physical and intellectual development, for they are addressed to the senses and to the mind. They lead to habits of minute observation and patient investigation; they direct the power of association to useful trains of thought; they impart to all the faculties strength, acuteness, and accuracy. The spirit of inquiry implanted in human nature by divine Providence, and often checked by untimely book instruction, is, in these lessons, rationally encouraged and directed, so as to make young persons

take an active part in their own education. Thus, early accustomed to observe, compare, reflect, and judge for themselves, they will preserve through life the useful habit of examining everything, will draw correct inferences from all that passes within their sphere of observation, and will be likely, from this practical logic, to take a greater interest in the abstract precepts and metaphysical speculations of science.

Not only can conversations on objects impart valuable information and make science interesting, but they are the best preparation for scholastic instruction, for the study of foreign languages, and for all philosophical pursuits. The variety of subjects which is offered to the consideration of children, and the active part which they take in the conversations, suit the liveliness and buoyancy of the first period of life much better than reading, which condemns them to a mental calm and physical immobility, in direct opposition to the imperative demands of nature. Truths which appear dull in the solitude of the study, become most interesting when discussed in conversation.

Oral instruction presents, at an early age, several advantages over book instruction: it is capable of being made more intelligible; it permits the entering into more minute details, employing more familiar terms, and using repetitions which serve to impress the subject better on the mind of a child. The inflections of the instructor's voice indicate the degree of importance to be attached to the words he uses, or to the ideas he conveys. He passes rapidly forward, or dwells on such particular statements as he conceives are needed by his pupils.

These lessons cultivate in young people the talent of rational conversation, which, in ordinary education, is entirely left to chance, although it is the most useful, the most social, and the most intellectual of all talents. They impart that free excursive acquaintance with various learning which makes the pleasing and instructive companion, and if they were generally adopted, they would not fail, in the course of time, to raise the tone of conversation in society. The powers of language of the learners being constantly called forth in proposing and answering questions, in stating the results of their observations, and in making verbal or written summaries of the subjects on which they have conversed, they will necessarily acquire great facility of expression in connection with great clearness of thought. And if they excel in conversation they have every prospect of success in public speaking.

The variety of sensations and the pleasing action of the mental faculties throughout these animated lessons, will, by rousing the creative powers of imagination, produce fertility of thought and aptitude for extempore speaking. Under the influence of the agreeable emotions, arising from the contemplation of nature and the admiration of its wonders, the power of association in the young will retain that vividness and that freshness which are the life-springs of eloquence. The most beautiful images of oratory are those which it borrows from the material realities of nature. The more diversified the instruction, the greater will be the number of ascertained facts, and the more extensive the command of language. Expressions and facts thus treasured up by the mind will remain ready for future use. So deep and lasting are the impressions and associations of early life that they are vivid in the recollection of a person advanced in years, when those which were received in maturity have long since vanished from the memory.

The advantages of this practical course of elementary instruction are not confined to the mere acquisition of facts: they are multiplied by the infinite resources it offers to the mind for coming at new facts and guarding from the prejudices which result from a narrow circle of observation. The early exercise of the senses, in connection with the cultivation of the intellect, open the mind to conviction, by furnishing frequent opportunity of knowing that to be true which, at a previous period, appeared improbable. A young person is led to conclude that there are in nature many laws and phenomena yet unknown to him; in other words, he learns to distrust appearances and to desire the experience of others to corroborate the testimony of his own senses and his own reason. This feeling will naturally awaken in him an eager curiosity to know what others have thought and written on the same subjects. He attaches to the facts which have not come within his observation and are communicated to him, the degree of probability which is due to them, and which he is enabled to appreciate, not only from his acquaintance with similar facts, but also from the habit he has acquired of tracing back the causes which may produce analogous effects. Neither blind scepticism, nor weak credulity can be the portion of him who is accustomed to careful observation and mental activity; who, in the search after truth, depends as much on the data furnished him by his own reason and his own senses as on the testimony of others.

It has been justly remarked by Dr. Beattie, that a mind prepared by proper discipline for making discoveries of its own, is in a much higher state of cultivation than that of a mere scholar who knows nothing but what he has been taught.* The method of instruction above unfolded admirably answers this idea of intellectual education; it will be found the most efficient means that can be devised to render the mind a fit instrument for discovering, applying, and obeying the laws of the Creator. It will scarcely be disputed that investigation of the works of nature and of man, observation of the facts and phenomena of the material universe, intimate acquaintance with the properties of things, and insight into the laws of the moral, intellectual, and physical constitution, are as far superior to the exclusive study of words, as the substance is superior to the shadow. It is impossible to calculate the benefits which would accrue to a nation, if all its families and schools were to send forth their hundreds and thousands thus educated. (18.)

* See *Essay on the Utility of Classical Learning.*

CHAPTER III.

ELEMENTARY READING.

SECT. I.—AGE AT WHICH READING SHOULD BE TAUGHT.

READING, in order to be profitable, requires an acquaintance with things and a degree of reflection which cannot exist at an age when words do not as yet convey clear and precise ideas to the mind. Its object is to correct, extend, and perfect the notions acquired by previous observation and experience. Books, as the records of traditional knowledge, supply the deficiencies of oral instruction; they should be resorted to when the authority of parents and instructors is no longer sufficient for the complete enlightenment of the young mind. Initiation into them must therefore be deferred until they can be made instrumental to intellectual acquisitions—that is, towards the middle of the second period of youth.

When a child reads at a very tender age, he necessarily meets in books with many words and forms of speech with which he is unacquainted: contrary to a fundamental principle in education, his mind takes cognisance of the signs before it is impressed with the ideas signified. Unaware of the intellectual purport of this art, he is often satisfied that he has read a book when he has pronounced every word of it. A great number of children who begin to read very early acquire the habit of running over the words without attaching to them their real sense, or attending to their logical connection. A child will be less exposed to this danger who is not taught to read until after the age of seven or eight, and who has been duly prepared by an extensive acquaintance with language gained from the conversation of well-informed persons.

Under the mistaken notion that reading cannot be commenced too early, a child is usually taught the names of the letters as a step to spelling, long before his judgment and power of discrimination can be effectually directed to these abstract and arbitrary signs. To learn the alphabet is to him a task equally painful and useless,—"painful, because there is no tie to hold the letters

together in the memory, and useless, because he never meets with the letters again in the same sequence, till he come to consult a dictionary."* The absurdity of the spelling process and the immaturity of the learner's age combine in causing months, even years, to be consumed in acquiring what could, at a proper age, be attained in a few weeks by a rational method.

When, after much time, labour, and annoyance, the child begins to pronounce words at sight, he has to be furnished with books of the lightest and most amusing character, suited to his immatured mind, and embellished with coloured prints and often detestable caricatures, which deprave his taste, in order to coax him into a liking for reading, and keep up the practice until his ability to read may be made subservient to the acquisition of knowledge. But the end is defeated by the means; for the habit of frivolous and ridiculous reading prevents future relish for the unvarnished narratives of history and the simple truths of science or morality. Besides, young people, by indulging in the perusal of childish nonsense, only gain familiarity with the most common words and trivial modes of speech. Under such training how can a child be expected to advance in intelligence and literary acquirements?

Among the works written for children under the age of seven, few contain any information which could not be better acquired from the daily incidents of social life. They are frequently mere speculations on the weakness of parents, who, usually prepossessed in favour of the abilities of their offspring, imagine that, by early initiating them into reading, they will secure to them through life that intellectual superiority which they fancy nature has conferred on them. Yet, experience proves the contrary; and in most cases it would be extremely difficult to discover a difference between the mental acquirements of two persons twenty years old, one of whom began to read at the age of four, and the other at the age of eight or nine. "Where is any evidence," exclaims Dr. Brigham, "that books put into the hands of children before the age of seven or eight, are of any lasting benefit, either to the body or to the mind?"†

If reading be commenced at eight, the child, setting out, as may be expected, with more steady attention, greater desire for information, a consciousness of the value of reading, a mastery of the pronunciation, better and more extensive knowledge of

* Professor Pillans. *The Rationale of Discipline, &c.*

† *On the Influence of Mental Cultivation and Mental Excitement on Health.*

the words which he will meet in books, will rapidly get over the mechanical part of the art, and will probably take at once an interest in such books as will contribute to his moral and intellectual improvement.

SECT. II.—OF LEARNING THE ART OF WRITING BEFORE THAT OF READING.

Not only is penmanship practicable at the age which we have fixed for learning to read, but it may be affirmed, consistently with reason, that it can, with the utmost propriety, be taught before reading. It is an imitative art, and, as such, it is more interesting to a young child than its sister art. If, as we recommended, he has been early exercised in linear drawing, of which it is a minor branch, and especially in the sketching of geometrical figures, he will readily and successfully endeavour to form letters which are but modifications of these figures. The very attempt to sketch the letters would be to him an easy and interesting way of learning the alphabet. The precedence which may be claimed for the learning of the mechanical process of writing over that of reading is conformable to the relative progress in the development of the physical powers; for the hand is capable of forming the few straight and curved lines, which are the object of penmanship, before the voice can utter all the sounds and articulations of a language. Writing is less intricate than reading: it engages only two organs, the *eye* and the *hand;* whilst learning to read requires the almost simultaneous action of three organs, the *eye* on the form of the letters and the composition of the words, the *ear* on the elements of pronunciation, and the *voice* on their utterance. The act of writing gratifies the child's natural propensity to imitate, and presents little difficulty, as the letters are invariable in their forms. Reading, on the contrary, requires great effort of attention and memory, by reason of the ever-changing pronunciation of letters, syllables, and words. The elements to be acquired in writing are only twenty-six in number; those to be acquired in reading, consisting of the various import of the alphabetic characters, amount in English to above three hundred. But what greatly facilitates the learning of writing is, that it does not, like reading, necessarily demand the uninterrupted assistance of a teacher. A set of engraved models, a few general directions, and an occasional glance at the child's performance,

would supply all the assistance he needs. By means of a transparent slate, or by following the method of Taupier, which consists in writing over a model traced in red ink, a young child might, without almost any other aid, commence the practice of this art long before he could with propriety be taught to read. Thus would linear drawing, writing, and reading be taught in a natural order, drawing being anterior to writing, and writing to reading.

So simple, easy, and purely imitative is the art of writing, that its acquisition entirely rests with the learner, not on the caligraphical powers of a teacher, whose office may, in most cases, be dispensed with. Of all the directions given to beginners, when in the act of writing, the only one we think really valuable is the caution against stooping over their copy-books; and a knowledge of anatomy, rather than of penmanship, would qualify an instructor for enforcing this hygienic law. In schools in which a large number of children are simultaneously engaged in this elementary branch of instruction, the writing-master does very little more than mend the pens of his pupils; and he often dismisses them after having looked at their performance only just enough to give them a good or a bad judgment. Should a willing child be left to himself altogether, he would have the whole credit of his improvement; and the consciousness he would thus acquire of his independence, would early create in him the valuable habit of self-instruction.

Some instructors write model lines in their pupils' copy-books; this practice, whatever be the motive—economy, display of skill, or a pretension of usefulness—is prejudicial, because it consumes much time, especially in a large class; and this written model being seldom equal to an engraved one, the imitative powers of the learners are ill-directed, and their chance of arriving at good hand-writing consequently diminished. With regard to the manner of holding the pen, which this practice may be supposed to teach by example, should it require to be taught, this may be best effected by the instructor exhibiting the right way, whilst the learners are themselves engaged in writing. However, in the upper and middle ranks of society, children are afforded frequent opportunities of seeing people write, and hence learning by imitation how to hold the pen, no writing-master is needed to teach this part of the art.

We cannot dismiss this subject without observing, that penmanship not being, like the fine arts, practised for its own sake,

but as a mere instrument of communication, need not be learned with a view to perfection in the execution; at the same time, that it is unpardonable to write badly, when, as Lord Chesterfield justly remarks, "It is in every man's power to write what hand he pleases." * Children should be well impressed with the idea that it is the habit rather than the ability to write well, which is desirable for the practical business of life. Rapidity and legibility are the chief qualities of writing which are required by those who are not intended to be clerks or writing-masters. The first of these qualities is useful to the writer; the second indispensable to the reader. Those who aim at anything more waste time, and sacrifice the end to the means. Perfection in penmanship may even sometimes prove a real injury: it may mar a young man's prospects in life, by inducing his employers to keep him in an inferior office, for which a scrivener's skill is desirable; it may also, from the pride naturally generated by success, lead its possessor to value this acquirement above its deserts, and to attend to the mechanical more than to the intellectual part of writing. The elements of composition are often estimated in inverse ratio to their importance; it is not rare to see parents give to their children a writing-master for five or six years, while they never have them taught either to think, or to express their thoughts in a correct and pleasing style.

SECT. III.—ON THE MODE OF TEACHING TO READ.

Oral reading is the conversion of the written language into the spoken language which it represents. The written and the spoken words stand with regard to each other in the relation of signs and things signified. The power of using the signs demands a previous acquaintance with the things which they represent: in other words, a mastery of the pronunciation is indispensable as a preparation for reading, the more so as the first step in this art, like the first step in speaking, should consist in uttering syllables, not in naming letters. A child should not then be taught to read, until he can pronounce distinctly and correctly. He should know how to speak before he can reasonably be expected to know how to read. "After I had begun to teach reading," says Pestalozzi, "I soon discovered that my pupils

* *Letters to his Son.* Let. 172.

wanted, first, to be taught speaking; and this led me to commence with the pronunciation." *

That the elements of an art must be first taught is a principle generally insisted upon; but, in assenting to it, in the present instance, it should be borne in mind that the true elements of oral reading are the sounds and articulations represented by the letters, not the names by which these are designated in the alphabet, as the power and the mode of using tools, not their names, are the preliminary notions to be acquired in the practice of the arts. In directing a child's attention to the elements of the written words as a preliminary step to reading, it is not then the names of the alphabetical characters which should be taught to him, but their phonetic powers as constituent parts of words; for these two things are essentially distinct, although, in the case of the vowels, they sometimes coincide. The names of the letters only lead astray, if introduced in reading the words.

This fact becomes obvious, when it is observed that, from the imperfection of our alphabets, and from the successive alterations which the orthography of modern languages has undergone in the course of time, it is far from faithfully representing the pronunciation. In English more particularly, although each letter has but one name, it signifies several vocal elements. The five vowels, for example, taken separately, may each be sounded seven or eight different ways; their various combinations assume collectively more than one hundred and fifty modes of representing simple and compound sounds, so that the thirteen elementary sounds of the English pronunciation are each expressed, at an average, in more than fourteen different ways. From this "confusion worse confounded," it frequently happens that each letter stands in turn for the sounds of the others, that simple sounds are represented by compound letters, and compound sounds by single letters. Moreover, every letter is occasionally silent, some are uttered in an inverted order, a few even are pronounced which are not in the written word; sometimes, also, long vowels are pronounced short, soft consonants are pronounced hard, and *vice versâ*: in fact, the alphabet and pronunciation are constantly at variance with each other; and, in reading, the letters assume their alphabetical sounds at the utmost once in ten syllables. How, then, in the name of reason, can a child extricate himself from this labyrinth, with the alphabet as his clue?

Naming in succession the letters of a word, far from giving an

* See *American Annals of Education.*

idea of the pronunciation of that word, leads the learner into a succession of errors. The more thoroughly he knows the alphabet, the more certain will he be to mispronounce the letters in words, especially the consonants, which are never pronounced in the way the child is taught to name them. No wonder, then, that reading appears to an English child as difficult an art as reading Chinese really is to the children of the Celestial Empire. The repeated blunders which he unavoidably makes, the tediousness of the task, and the uninteresting combinations of letters, the use and meaning of which he cannot understand, are often causes of secret and unconquerable dislike to reading. With reason, indeed, may the young child regret the moments of sport and joy of which this dull occupation robs him, without conferring mental benefit in return; for the method of teaching to read by the alphabet and spelling, is not less deficient in exercising the intellect, than it is irrational for acquiring the art of reading itself. In fact, it only demands that unintelligent power of repeating, that mechanical memory which some of the lower animals have in common with man; for the child, utterly unable to infer from the names of the letters what sounds their combinations produce, must be told every syllable and every word, which makes this exercise completely destitute of intellectuality. Teaching to read by spelling turns away the young mind from the path of analysis, and early encourages habits of believing and parroting in place of the habit of thinking.

The alphabetical names of the letters are objectionable only when considered as an introduction to reading; they become indispensable whenever the letters are alluded to in conversation. A child should, for the latter purpose, be taught the alphabet; but it is immaterial at what time, whether while, or after, learning to read, provided he divests himself of the alphabetical names when engaged in reading. If, however, consistently with reason and similarly to the mode of learning the names of things in general, he is told those of the alphabetical characters when some progress in reading has already familiarised him with their meaning, he will learn them very rapidly—aye, in a few minutes.

The first stage in the art of reading, that is, the power of uttering syllables and words at a glance, should be attained by the most expeditious process which can be contrived, in order to enter, without loss of time, on the second stage in the art, which is the great end proposed, namely, the power of following

the ideas conveyed by the written words as the eye runs over them. The attention of a child cannot, at first, be directed simultaneously to these two acquisitions; for the comprehension of a written subject results from instantaneous association of the written with the spoken words, and of these signs with their corresponding ideas,—which two mental operations are quite impracticable at this time, when his attention is exclusively engaged in inferring the sounds of individual words from the letters. He should not, at the entrance upon this art, be expected to do more than understand each word as he proceeds.

In teaching children to read, the easiest and shortest way is, as already stated, to make them unite letters into words by uttering, not their alphabetical names, but the sounds and articulations for which they stand in each particular word. With this view, the spoken word, the written representation of which is before the eye of the child, should be divided into its vocal elements, whether expressed by one or more letters, and a reproduction of these audible elements is effected by uttering each in succession, pointing, at the same time, at the letters which stand for them in the corresponding written word. Combinations, representing vocal elements, such as *au, ea, oo, ph, sh,* in which each letter is divested of its original power, will present no difficulty to the child, provided he is made to consider them as single characters. The articulate word *laugh*, for example, although containing five letters, is composed of only three vocal elements, represented by *l, a, f:* the child is taught, by imitation, to utter the articulation suggested by *l*, devoid of any vowel sound; that is, to bring the tongue in contact with the palate and breathe with sufficient force to render the effect of this contact perceptible. He is then desired to pronounce the compound vowel *au* at once *a*, as sounded in that word, and finally, to consider the combination *gh* also as one sign, and give it the pure articulation of *f*, as produced by breathing while the upper teeth are in contact with the lower lip. These elements, being afterwards uttered without interruption, will necessarily produce the articulate word *laugh*. Silent letters, as in k*n*ow and *lam*b, should not be uttered: the child should be made to notice this peculiarity, and be given rules for his guidance when his reason permits, as must be the case if he is not taught to read before the age of seven or eight. Thus will he, from a knowledge of the powers of the letters, easily read the words in the composition of which they enter. Reading is, in fact,

nothing but the successive utterance of the vocal elements into which the words may be decomposed.

To facilitate the adoption of the phonetical method, the vowels and consonants (simple and compound) may be classified in various series as they represent elementary sounds or articulations, and arranged vertically on separate slips of thin wood or paste-board. The child having been taught the power of the vowels and consonants on two slips, these are brought in contact, one before the other alternately, and being made to slide alongside each other, a variety of syllables is produced, which he readily pronounces, from his knowledge of the vocal elements in each slip. The different series are learned in succession, and, as each is mastered, he joins it to those previously known, with which it admits of being combined. Thus will he unhesitatingly pronounce all possible combinations. A book suited to his capacity being now produced, his instructor reads some sentences, to show the verbal connection; these he easily reads in his turn, aided by his previous acquaintance with the powers of the letters, the pronunciation of the words, and the ideas conveyed. After a few such repetitions, he will be independent of a model, and will only require occasional help when anomalies occur. (19.)

The phonetical method, exhibiting the principle of alphabetical representation and leading a child from the powers of the letters to the pronunciation of the words, is both intelligent and interesting. It does not burthen the memory, because a knowledge of the vocal elements, which are comparatively few, suffices to enable him to read; whereas words having generally more letters than vocal elements, and the alphabetical names being no clue to the pronunciation, the memory is overtasked and the child's progress much retarded by spelling. The art of reading can be taught in a few weeks by the phonetical process; two years are often insufficient for teaching it through the alphabet. The method recommended is now so well established in France, that the French Academy and the best grammarians have, in conformity with it, given to the consonants the denomination of *be, ce, de, fe*, &c., (in which *e* has the faint sound of *u* in *but*,) these names nearly approaching to the articulations which they generally represent. This rational mode of teaching to read without spelling, now generally pursued on the continent, is far more applicable to the English language than to any other, and yet the people, slow of improvement in almost everything

relating to education, continue very generally to adhere to the tedious, nay, absurd spelling process. The children, especially of the poorer class, suffer from this unpardonable apathy, because the greater number of them, unable, during the short period they can attend school, to master completely this great instrument of knowledge, remain through life ignorant and uneducated.

It has sometimes been stated in favour of the old method, that the naming of every letter in words teaches their orthography: this assertion is unfounded, because the words, not being arrived at through the letters a child names, are not associated in his mind with those letters, and the first steps in the art have been long forgotten by the time he has occasion to express his thoughts in writing: all those who spell badly (and their number is considerable) have been taught to read by the spelling process. An acquaintance with the art of reading, by whatever method it has been gained, does not imply a knowledge of orthography; the latter acquisition demands special exercises. It is not, in fact, the naming of the letters, but close attention to their combinations in words, and practice in writing them from correct models, which leads to accuracy in spelling. In learning a foreign language the words are seldom decomposed into their alphabetical elements for the purpose of being read, and yet their orthography is, in general, very easily attained.

Another successful way of proceeding is that which Jacotot recommends; it is as follows: the instructor directs the attention of the pupil to the first sentence of any passage in a book; he reads it distinctly, and points out each word to him. The child is made to repeat the first word and to notice the alphabetical and vocal elements of which it is composed; he then repeats again that first word in connection with the second, and is also made to notice the letters and syllables which the second word contains. This being done, the analytical examination of these two words exhibits to him the letters which they have in common and the new letters with which the second word makes him acquainted. He proceeds afterwards to the third word, which he repeats in the same manner after the instructor, in connection with the first two, and, in the same manner also, analyses it and compares its elements with those of the first two words. Thus he continues, adding the following words one by one, to what preceded, and comparing the elements of which they are composed with those which he has already noticed in

the foregoing words. Five or six lines thus read at every sitting will, in a very short time, enable a child to read.

Any method we hold to be rational and expeditious which, following the analytical process, decomposes the words into their vocal, not into their alphabetical elements; which substitutes syllabic for alphabetic reading, that is, teaches the powers of the letters before their names, and the pronunciation of syllables before their spelling. As to the old method of teaching to read, so universally and blindly pursued, it would not have existed so long, if those who are the most interested in having the evil remedied, were not, at the time they suffer from its infliction, too young to perceive its defects. Another reason why this branch of instruction is so little improved is, that it seldom comes under the superintendence of judicious teachers; children being generally instructed in elementary reading and spelling by inexperienced nursery governesses, or other persons unacquainted with the principles of mental discipline, and often unwilling to deviate from the beaten track.

SECT. IV.—OF EARLY ATTENTION TO THE SUBJECT-MATTER OF THE BOOK.

After the mechanical comes the intellectual part of reading. From the moment that a child knows the powers of the letters and readily associates with the written form the pronunciation which it represents, his attention should be directed to the ideas. With this object in view, his first reading lessons should convey simple and familiar facts, and should gradually advance as regards, not the length or difficulty of the words, but the seriousness or usefulness of the subject: his progress in the art should be regulated by his intellectual progress. The power of reading difficult words should not anticipate his power of understanding them, lest he should acquire the false notion that reading consists solely in pronouncing written words. His instructor should see that he comprehends, first, the import of each word, then, the sense of the whole. The habit, early acquired, of associating the ideas with their written signs, will secure his acquisition of the art of reading, and make it a delightful occupation.

The instruction conveyed by the first books should be treated in an interesting manner, that the child may be induced to read much; and it should be expressed in familiar language, that he

may not be discouraged by meeting too many strange and difficult words. It will then be to him an easy and pleasing task to understand in the written form what would not be above his comprehension, if it were spoken; "what is read with delight is commonly retained."*

The child should, when reading aloud, be early made to suit his tone to the subject, not only because this is an essential element of good reading, but because it is conducive to a better understanding of the text, as it obliges him to attend to the ideas. However, this object will be facilitated, if the instructor frequently read to his pupil, to show him how the sense is conveyed by the connected words of the written language and marked by corresponding tones. This will also serve him as a model of delivery: it will teach him pronunciation, emphasis, pauses, and inflections.

As soon as the child reads fluently, he should attend chiefly to the subject. It is only to country children and to such as have been much neglected, that oral reading will be of service in removing provincialisms or other erroneous pronunciation. In ordinary circumstances, a child reading to his instructor, rather for the ideas than for the delivery, should be given all the explanations of which he has need. The clear and rapid comprehension of the written language which will thus be gained, soon enabling him to take pleasure in reading books, will become an inexhaustible source from which his stock of words and ideas will be daily increased. The disinclination to read, which some persons feel, often arises from the confused notions which they, at first, attached to words.

The extensive knowledge of things and language which a child of eight may have gained by the afore-described conversational instruction, having so prepared him that he can meet but few unknown words at a time, he will often, in the absence of an instructor or a dictionary, easily ascertain their import from the context: the same words recurring occasionally, he will at first guess at their meaning, and, by degrees, acquire a complete knowledge of them. This is an application to reading of the natural course which he pursued in acquiring familiarity with oral expression. What he knew of his own language before he was taught to read, he gained, not by fingering a dictionary, or by committing definitions of words to memory, but by that unconscious and instinctive process which goes on, when words,

* Dr. Johnson, *The Idler*, No. 74.

in their just and infinitely varied connection, are repeatedly heard, and not fully understood until a meaning more and more precise is gradually attached to the sound.

The instructor ought occasionally to make what is read by the child a text for conversation, and, by judicious questions and observations, elicit the full meaning of the author. Every sentence, every word of a book, may become a starting point from which to launch out into many interesting subjects, and, thereby, extend indefinitely the benefits of the course unfolded in the preceding chapter. The instructor would, in this way, enrich the mind of his pupil with useful information, and accustom him to reflect on what he reads. That nonsense in books so often escapes detection, and that men are, in general, so easily imposed upon by words without meaning, may be ascribed to early habits of careless reading. Few, indeed, are those who know how to read!

The better to exercise the reflective and the recollective powers of the young reader on the subject of his book, he should, as he advances in age and intelligence, be questioned on its contents, and be required to give an account of them, sometimes verbally and sometimes in writing. He should state the purport of the book, narrate the principal facts which it records, describe remarkable persons or places; and, to give to this exercise a moral tendency, he should particularly dwell on virtuous traits and the descriptions of noble characters. Such summaries, if continued after the age of twelve, will not only prevent his becoming a superficial reader, but will also teach him to condense and arrange his ideas, and to appropriate all that is valuable in what he reads; they will exercise his attention, memory, imagination, judgment; and will especially ensure to him readiness and copiousness of expression.

SECT. V.—BOOKS SUITED TO CHILDREN, AND ADVANTAGES TO BE DERIVED FROM A PROPER COURSE OF READING.

In urging young people to read, it is not so much a taste for that occupation as a love for knowledge, which ought to be encouraged. They should be early habituated to seek their intellectual enjoyment in the reading of moral and instructive books. The mere desire for reading often seeks its gratification in trivial subjects, which tend to excite the emotions rather than to give information. A taste for light reading is the more dan-

gerous, as it tends to enervate the mind and unfit it for serious studies. Children should be given no books, but such as contain sound morality and instruction; and, if their minds have not been previously spoiled by frivolous reading, they will most probably peruse them with pleasure.

Parents and instructors ought to be as cautious about the books children read as about the company they keep. Works should be selected with reference to the subjects introduced in the conversations on objects, that they may confirm and extend the information already gained. The homeliness of the subject-matter should not be objected to as rendering it unworthy of consideration; for, if their style be pure and elegant, it will serve as a model of composition; and it is one of the great objects of book instruction to teach young persons, by the example of good models, to clothe their ideas, even the most familiar, in appropriate language.

A good choice of books cannot now present any great difficulty; for there is, in every department of modern literature, a large supply of works for young people above the age of eight, in which knowledge is skilfully blended with entertainment. Among the most useful and interesting subjects are traits of benevolence, courage and other virtues, moral tales or historical facts illustrative of those truths which are best inculcated by example, natural history, voyages, travels, the biography of eminent characters, especially of self-raised men, and of such as have conferred benefit on mankind by their discoveries, their inventions, their persevering industry, or their virtuous actions. These would be fit subjects of study, as they would present to children useful lessons of morality, perseverance, and steadiness of purpose. The life of a good and wise man is better than a dissertation on goodness and wisdom. From the admiration to the practice of virtue the passage is rapid: such is the force of imitation, that, if a child takes pleasure in the recital of noble and generous actions, he will take pleasure in performing them himself.

So powerful an instrument of education is reading that, by proper gradation of didactic books, a young person may acquire various branches of knowledge more pleasantly and more effectually, than by the ordinary routine of mnemonic tasks. If parents were fully aware of this truth, and would encourage the natural inquisitiveness of children, a few select works would suffice to enable the latter, especially girls, who do not require the discipline of public education, to instruct themselves at home

at less expense, more thoroughly, and with less danger to their moral purity, than they could be taught in the greater number of schools. This object would be the more certainly secured, if the children were early accustomed to consult dictionaries, maps, encyclopedias, and other books of reference, for the meaning of words and the explanation of geographical, historical, and mythological names. In proof of the efficiency of reading as a substitute for school lessons, we may affirm, without fear of contradiction, that the knowledge which the great majority of the well-informed possess in the different walks of literature or science, has been acquired altogether out of school and chiefly from reading.

Although it is, in general, advisable to read modern before ancient history, the annals of one's own country before those of another, yet those who are destined to receive a classical education may prepare for it by early reading abridgments of ancient history, concurrently with occasional oral remarks from their instructors, on mythology and ancient geography, as also on the customs and institutions of the Greeks and Romans; for the difficulties which the study of ancient languages presents, proceeds as much from an ignorance of things as from an ignorance of words.

The occasional reading of fairy and romantic tales which have no immoral tendency cannot be objected to, provided the children are able to discriminate between truth and fiction. Such works are useful to enliven the mind and exercise the imagination. Milton, Shakspeare, Walter Scott, Goethe, and the greater number of eminent imaginative writers, indulged in such readings in their childhood.

We shall again advert to the advantages arising from reading, in the second chapter of the following Book, in which the subject will be considered with reference to a foreign language.*

SECT. VI.—INITIATION INTO ORTHOGRAPHY, GRAMMAR, AND LITERARY DISCRIMINATION.

Although the import of language is the chief object to be attended to in a practical course of instruction, its material form should not be neglected. The child must be familiarised

* We refer parents and instructors to the *Quarterly Review*, No. CXLVIII., for an extensive and classified list of excellent juvenile works, both entertaining and instructive.

with the nature and composition of words, their grammatical concord, and syntactical arrangement. A knowledge of the orthography will be promoted by habitual attention to the material form of words: an impression of their appearance as a whole confers the power of reproducing them, though each separate letter has not been considered individually. Such a habit should be early formed to enable the child to spell correctly, and the sooner to accustom the visual organ to observe the component parts of words, he should be frequently examined on the spelling of some of the words contained in the last passage he has read.

Although reading with due regard to the orthography of words may, in addition to the written compositions previously recommended, preclude, in a great measure, the necessity of special exercises, this department of the language will receive further assistance, if the attention of the child be directed to the principles of grammar which regulate the variable orthography of words. But grammatical instruction ought, in the first two periods of youth, to be restricted within narrow limits, and should always be inferred by induction from the facts of language which are familiar to the pupil.

It is in the course of conversation and in analysing the language of his book, that a child should be initiated into the first elements of grammar. The nature and relative functions of the different parts of speech may be successively explained as they arise from the particular circumstances of the discourse,—*substantives*, when the names of familiar things are mentioned; *adjectives*, when their properties are stated; whilst the respective places of these two species of words will be frequently exhibited in the course of reading. The distinction between proper and common substantives, generic and specific terms, the primitive and the figurative sense of words, may, as they present themselves, be rendered obvious by reference to the things to which such expressions apply. *Verbs* may be brought to the notice of the child, by showing him that they convey the idea of an action or state; and their classification, nature, and government may be afterwards explained by the different forms which they assume and by the various substantives and pronouns which are joined to them as subjects and objects. *Prepositions* may be shown to express relations, and their import be illustrated by placing two objects in different positions with regard to each other. Equal facilities may be afforded to show the learner how

pronouns supply the place of nouns, and how *articles, conjunctions*, and *adverbs* modify the ideas conveyed by the other parts of speech. The instructor may also take advantage, as they occur, of the verbal inflections indicative of gender, number, case, comparison, or other grammatical distinctions, to elicit the most general rules of accidence and syntax. Grammatical notions inculcated in this manner will be better understood and retained than if years were spent in committing them to memory from grammars.

In minutely descanting on objects, or investigating the meaning of the passage which the child is engaged in reading, different species of words bearing on the same idea and with one common origin, must frequently occur, which will afford favourable opportunities of showing him their derivation from one another or from a foreign idiom, and thereby teach him the formation and etymology of the vernacular tongue. Prefixes and affixes should be brought to his notice, and families of words occasionally introduced, with a view to make him ascertain the roots, derivatives, and compounds of leading words. This exercise would prepare him for afterwards discriminating of himself between all analogous words; it would especially add to the interest arising from the study of the languages from which his native tongue has been derived.

The present Book having for its object the practical rather than the theoretical knowledge of the native tongue, we shall reserve our observations on the study of grammar for further consideration. This study will, besides, receive considerable assistance from the learning of a second language. The mind is apt to neglect the elements of expressions which are understood instantaneously, whereas the various exercises of the comparative method, which are requisite for acquiring a foreign language, are most favourable to grammatical analysis. We will only observe here that, if the child, in the course of his reading, be made incidentally to consider words relatively to the ideas which they convey, to their mutual relations, to the changes which they undergo, and to the places which they occupy in sentences, he will find no difficulty in understanding the definitions, rules, and technicalities of grammar, when he, afterwards, enters on a systematic course of grammatical study.

At a more advanced period, the child will have his taste formed in literary matters and his mind opened to elevated thoughts, by reading works distinguished for elegance of style

and soundness of ideas. If their excellences, as well as their defects (from which no author is free), be carefully pointed out, he will not only gain an acquaintance with his national literature and improve his power of discrimination, but he will be the better prepared for understanding the foreign writers which he may subsequently read. In this manner a child may, for three or four years, read with considerable profit and pleasure a large number of well written works. From these he will acquire extensive knowledge (both practical and critical,) of his own language, and will then enter with every expectation of success on the scholastic study of a foreign language; for the large stock of native words with which reading and conversation have familiarised him, and the habit of expressing his own ideas with propriety and perspicuity, will considerably facilitate the work of translation.

Such a preparation was deemed indispensable by Condillac, who, in educating the young Duke of Parma, confined him for two years to the study of French standard works, as a previous step to the learning of Latin; "because," said he, "before undertaking the study of another language, we must know our own, and, above all, possess information, that we may not be stopped by anything but the words."* It cannot be doubted that learning a second language through the maternal and by continual comparison with it, will be easier and more certain in proportion as the latter language is better known. It will then be prudent and consistent with the best interest of the learner not to let him enter upon the comparative course, until he can fully comprehend the books through which it is to be pursued. This, in ordinary cases, cannot be, as already observed, before the age of twelve.

SECT. VII.—ADOPTION OF THE CONVERSATIONS ON OBJECTS IN FAMILIES AND SCHOOLS.

The practical course which has now been unfolded is claimed by all the children of an enlightened community, and is equally applicable to private and to public education. But, practicable as it is, we readily acknowledge, that it cannot, in general, be undertaken or regularly pursued by parents who are engaged in the numberless duties and occupations of social life. It is,

* *Cours d'Études. Motif des Études.*

therefore, principally addressed to instructors in elementary schools, as also to tutors and governesses who, residing in families, can devote all their attention to the moral and mental improvement of the children confided to their care. Families in the middle ranks of society, who do not employ resident preceptors, might encourage the formation of respectable infant schools, in which the children would receive instruction superior to that which is given in the infant schools of the poorer class. With adequate support, an establishment of this kind might possess skilful instructors, under whose direction the course which we have briefly sketched might receive great development; it would afford facilities for teaching one or two foreign languages practically; and might possess extensive apparatus and means for carrying out successfully the objects of primary education in its three departments, physical, moral, and intellectual.

The mental discipline of the first two periods of youth should not only impart positive and useful knowledge, but afford to all the juvenile members of a free community, independently of rank or avocation, the means of continuing and extending, according to the particular wants of each, the instruction received in these two periods. "Primary instruction," says a modern philosopher, "ought to be general; it prepares for all careers without leading to one in particular; it does not form artisans, but men." * The exercise of the faculties and the diversified range of information which are the objects of the conversational lessons, admirably answer this character of primary instruction. These lessons, adapting themselves to the circumstances of learners, are as suitable to the industrial and agricultural population, who are confined to elementary education, as to the children for whom they are intended only as a preparation for higher studies; they are based on the principle of giving young people a knowledge of the facts on which their welfare and success in life must depend, and can be made to relate to their peculiar circumstances, whatever be their station in life. They offer to the teacher every facility to suit his instruction to the ages and future prospect of his pupils: in an infant-school he will dwell on the exercises of perception and observation, and in a primary school on those of reflection. In country schools, the conversation may be made frequently to fall on natural and agricultural subjects; in sea-ports, on navigation and naval matters, and in inland towns, on industry and the arts,

* V. Cousin. *Rapport du Projet de Loi sur l'Instruction Primaire.* 21 *Mai*, 1833.

without neglecting, in any, the literary and scientific subjects of general interest.

The adoption, in higher schools, of the conversations on objects would prove most beneficial to the junior classes as a preparation for classical and scientific studies. The different professors who may be attached to such establishments, by conversing, each in his turn, with the children, would afford them further means of extending their knowledge of things and of language; because each teacher, following the bias of his mind and yielding to his habits of study, would naturally turn the conversation on the peculiar topics with which he is best acquainted. The pupils would also acquire clearness of thought and variety of expression, as the same things would be presented to them from different points of view and explained in different ways; while the questions asked by the various members of a class, and the diversity of their remarks, would be profitable to all, and would enliven these conversations by playful competition.

But, wherever this practical course of instruction is introduced, —into families, infant and primary schools, or into higher educational establishments,—it should be carried on every day at stated hours, and persevered in for years. The time appropriated to this purpose should be extended in proportion to the age of the pupils and the seriousness of the subject treated; it may be apportioned, during the first three periods of youth, nearly as follows: one hour daily in the first period, one hour and a half in the second, and two hours in the third; allowing, in the last two, an equal portion of time for occupations in which children may acquire the habit of studying by themselves what depends on their own exertions, such as drawing, penmanship, reading, or preparing whatever lessons may be required of them.

Having now shown how the process of nature may, as it were, be methodized, to give to children a more extensive knowledge of the vernacular tongue, and thus prepare them for entering on the comparative study of foreign languages, we will, as a preliminary step to that study, consider, in the next Book, what is the proper subdivision of the subject.

BOOK V.

ORDER AND RELATIVE IMPORTANCE OF THE DIFFERENT BRANCHES OF LANGUAGE.

"Le secret pour apprendre beaucoup est de diviser les difficultés."
C. F. RADONVILLIERS.*

"Reading maketh a full man, Conversation a ready man, and Writing an exact man."—LORD BACON.†

CHAPTER I.

SUBDIVISION OF THE STUDY.

SECT. I.—THE DIFFERENT OBJECTS PROPOSED FROM THE STUDY OF A LANGUAGE.—NATURAL ORDER OF ACQUIRING THEM.

The complete possession of a language implies the power of using the two sets of signs of which it consists, spoken and written words, either to receive or to communicate ideas. A language presents, consequently, four distinct branches of study. We give them in the order in which they are successively acquired in the native tongue.

1. To understand the spoken language.
2. To speak.
3. To understand the written language.
4. To write.

The possession of the first two branches constitutes the knowledge of the *spoken language;* and the possession of the other two constitutes the knowledge of the *written language.*

Although there is great affinity between these four branches,

* *De la Manière d'apprendre les Langues.* † *Essays. Ess.* 50.

yet they are so far distinct, that the knowledge of one, or of two, does not necessarily imply a knowledge of the others.

A great portion of the people, in almost every country, though in possession of the spoken language, remain all their lives ignorant of its written form. The reverse is the case with the deaf and dumb, who can only know the written language. And more limited still is the acquirement of many, who can read the Latin and Greek classics, but can neither converse nor write in the languages to which they belong.

In ordinary circumstances, the learner of a foreign living language, not acquiring, like an infant, the art of speaking through the practice in hearing, but through books, must learn both departments separately, and may consequently possess one independently of the other. It frequently happens, that persons who have made some progress in learning to speak a foreign idiom, not having had much practice in hearing it spoken, experience, when they go abroad, the sad disappointment of not comprehending those whose language they perhaps have studied for a long time. Others, on the contrary, whether from a timid disposition, or from having had better opportunities of hearing the foreign idiom spoken, daily feel how much easier it is to understand than to speak it. A Spaniard and a Portuguese, or a Dutchman and a German, almost understand one another, although speaking each his own language and unable to speak the language of the other. To these facts may be added the case of children, who comprehend what is said to them, long before they have a sufficient stock of words to express their wants and their feelings.

It is obvious that the four branches above adverted to are, to a certain extent, distinct arts, the separate or collective acquisition of which depends on the method pursued; and, although they are auxiliary to one another, special studies and exercises are required for the attainment of each in a foreign language, the student ought not, at the outset, to aim at these four objects together.

Nature, the archetype and source of all perfection, is on this point, as on every other, our best guide. She shows us, by the successful manner in which we learn our native tongue, how we ought to proceed in the study of a foreign language. This fundamental principle needs to be proclaimed loudly and repeatedly; for, although the most important, it is the most neglected. We will subsequently unfold the processes of nature

in enabling a child to acquire language ; but, for the present, we must be content with indicating the order which she follows in the successive acquisition of its different departments.

In the preceding Books it was seen that curiosity, sympathy, and perception, which manifest themselves on the threshold of life, enable a very young child, through the language of action, to divine the meaning of those who address him. It is only after he has, by these instincts of nature, overcome the first difficulty of language, and made some progress in associating ideas with the words he hears, that another instinct, as powerful as the first, leads him to the second step ; he tries to express his wants by imitating the words and phraseology which he has repeatedly heard. At a more advanced period, he is taught to read, and, subsequently, he learns to write the expressions which have become familiar to him from hearing or reading.

Such is the order of the natural method, in which we see, that the maternal idiom is acquired by a process similar to that through which other imitative arts are learned, that is, by the study of models and persevering efforts in imitating them. So true is this, that if we wish to be understood, we must conform to established usage ; we must adopt the received words and idioms ; no deviation from these is allowable. The right of neology belongs only to inventive minds who are entitled to attach names to their discoveries, or to eminent writers who, in giving vent to their imagination, may sometimes introduce new expressions, which are readily adopted if applied judiciously and in conformity with the genius of the language.

SECT. II.—THE ACQUIRING OF FOREIGN LANGUAGES IN THE SAME MANNER AS THE NATIVE.

When the persons, under whose care the child is brought up, have a ready command of the foreign language they wish him to learn, it may then be easily commenced from the cradle, simultaneously with the national idiom, by following the same order, and adhering to the same laws, that is, by *perception*, *imitation*, and *analogy*.

If the infant be spoken to in the foreign as well as in the native tongue, these two languages will grow equally familiar to him ; they will, in fact, be both his own. He might even thus, by the instinctive process of nature, learn two or three foreign languages without confounding one with the other, if he had the

advantage of persons residing with him, who would speak them habitually in his presence. Many persons in the upper ranks of life, especially on the continent, have thus acquired several languages. In their childhood, they had tutors and attendants, natives of different countries, who always addressed them each in his respective tongue.

Among other instances we may record the successful prosecution of this plan by Mme. De Genlis. This eminent governess gave to the young princesses under her care an English child as a playmate; she placed near them an English chambermaid and another female attendant who knew Italian extremely well: their chaplain, also, was an Italian. By this means, at the age of five years, they understood three languages, and spoke English and French with perfect ease. Each young prince had a garden which he cultivated with his own hands: she engaged for them a German gardener, who never spoke to them but in his own language; he accompanied them, together with their German valet-de-chambre, in their morning walks, and, on these occasions, German was the only language used. They spoke English in their evening exercises, as well as at dinner; and, as she expresses it, "they supped in Italian."*

In Russia, where this plan prevails, resident French tutors and governesses have rendered their language so familiar among the higher classes, that French is spoken in St. Petersburgh as purely as in Paris; and many writers in that country have preferred that language to their own in communicating their thoughts to the public. Many eminent scholars have attained their proficiency in the ancient languages by practice from infancy; and, among others, the celebrated Montaigne. His preceptors, and even the servants who attended him, spoke nothing but Latin in his presence; and he declares, that, by this means, at seven he spoke that language better than French and as well as his master.† Until lately this mode of learning Latin was so prevalent in Poland, Hungary, and Bohemia, that the very peasants spoke it as fluently as their own tongue. It was also in this manner that the Romans, the first civilised nation who made the study of a foreign language a branch of education, had Greek taught to their children.

This natural mode of proceeding is the more successful, as a child, at a very tender age, has a wonderful aptitude for learning languages *practically*. He neither loses time in trying to

* *Memoir of her Life.* † *Essais*, liv. i. ch. 25.

account for irregularities, nor wastes his mental activity in vain theories. He goes directly to work; he listens, imitates, and only requires, for the full development of his linguistic endowments, that those who surround him be communicative and well informed. His perceptive powers, aided by the language of action, soon enable him to conceive the ideas which are on a level with his understanding, and rapidly to catch the sounds that denote them, to whatever language they belong. Thus, in the country towns of Wales and Ireland, and in all places which, on the continent, are situate on the borders of two countries, the children in the humblest classes of life usually speak two distinct dialects.

The constant need which, from his helpless condition, the child has of those who surround him, and his anxiety to enter into communication with them, make it necessary for him to seize upon the great bond of union that connects him with his fellow-creatures. His unsophisticated sympathy, his insatiable curiosity, his lively imagination, his impressible memory, his ready powers of perception and imitation, all assist him in the accomplishment of this grand object. How grateful ought not we to be to the Supreme Being, who has thus endowed us, from our most tender infancy, with propensities and faculties which lead to the satisfaction of our first social wants!

A parent, who can speak another language besides his own, ought not to overlook this great aptitude of childhood. He owes it to his children to put them, without trouble or loss of time, in possession of so valuable an acquisition. Let him make it a rule always, from the moment of their birth, to address them in the foreign language. If he steadily persevere for several years in this course, he will reap the fruit of his self-imposed restriction, by seeing his children, at a very tender age, able to understand and speak the foreign language. However, he must not wonder if he finds them more inclined to speak their own: this must be the case if they have had more practice in hearing it. They will use that language first, which they have heard the more frequently: but the other will certainly be spoken by them in due time; and, from the vividness of early impressions, it will also be long retained. The foreign words take deep root in the memory if they are acquired before the native ones have gained exclusive possession of the mind.

If a child be committed to the care of a foreign governess or servant, who, in her communication with him, always uses her own language, he will rapidly acquire facility of expression

in it; but domestic intercourse being usually confined to the most familiar subjects, his vocabulary will be very limited. As a means, therefore, of extending it, she should be provided with collections of wood-cuts or engravings representing various objects of interest, such as are found in many illustrated periodicals or other modern publications. The explanation of these pictorial representations will afford her frequent opportunity to employ words not used in the ordinary prattle of the nursery, and will, thereby, considerably enlarge the child's power of language.

This early acquisition of a second language is not only useful to a child as a means of communication, but it will considerably facilitate the after-work of education. From the moment he knows how to read, every branch of instruction may be studied through books written in the two languages. As soon as he can write, he may be put to the translation of the one into the other, an exercise the benefits of which we shall subsequently unfold. That time, also, which is usually devoted to the scholastic study of a second language, may then be given to a third, which will be the more easily learned. In fact, the whole process of his education, and especially the conversations on objects, may without difficulty be carried on through the medium of the foreign language, which by these means will become as familiar to him as his own can be.

SECT. III.—THE LEARNING OF A FOREIGN LANGUAGE BY MEANS OF OBJECTS OR PICTURES.

If circumstances have not permitted a foreign language to be spoken to children from their earliest infancy, or if the teacher does not understand the language of his pupil, the natural process may yet be adopted until the age of twelve, or even later, by means of the practical course of instruction detailed in the preceding Book.

The instructor, at first, makes his young pupil acquainted with useful words, by bringing before his notice familiar objects, such as the parts of the body, articles of dress, food, or furniture—anything, in fact, which being within reach or within view, may fix his attention, and by incorporating their foreign names in simple phrases in connection with such expressions as signify *here is, look at, hold, take up, give me, bring me,* &c.; suiting, at the same time, the action to the words. He introduces the

same objects several times in one sitting, and on successive days; and, as their names become familiar, he gradually adds a few new ones. This exercise, bringing the perceptive powers of the child into action, will certainly prove more attractive and effectual than committing to memory primers and vocabularies. He will not only retain the words, but learn their true pronunciation, if, conformably to the iterative process of nature, he frequently hears them, and as frequently utters them in imitation of the instructor.

When many nouns have by repetition been acquired by the child, the two verbs in the foreign language signifying *to have* and *to be*, as the most useful, are attached to them, as *I have a cup, you have some tea, I am on a chair, we are in the room*, &c.; and, as a farther step, two nouns are introduced in connection, as *I have a cup of tea, he has a bit of sugar in his tea, here is a tea spoon, you have bread and butter, you have a pencil in your hand*, &c.; the articles and words supplying their place, such as *my, your, this, some, each*, &c., as also the numeral adjectives, being occasionally introduced before the names of things, as the circumstance requires. An endless variety of familiar descriptive phrases may thus be analogically formed with the above-mentioned two verbs alone. We should, however, observe that in proceeding through these lessons, the instructor's care, in the beginning, should be to enable his young pupil to understand the foreign words and phraseology which he utters, rather than to make him speak. When words are readily understood and frequently repeated they will be easily retained.

Engravings, plain and coloured, may, with equal efficiency and great convenience, be used as substitutes for objects. A series of diversified and interesting subjects would afford to learners the means of gaining, in a pleasing manner, an extensive range of words;—a well-filled page, engraved from a good original, contains more elements of thought, and more materials of language, than the printed page of any school-book.

When a child has made some progress in the naming of objects, he must be initiated into an acquaintance with the words expressive of their parts, substance, colours, forms, and other sensible properties. By the use of suitable action, a short description of them would be fully understood without resorting to the native tongue; the more obvious properties of objects, like the objects themselves, need only to be exhibited and named. With regard to the adjectives significant of colour, form, and

other attributes of matter, they will be taught by the instructor's bringing into proximity several objects which have the same or opposite properties, and uttering the words signifying them conjointly with the names of the objects. In this manner, and with the aid of the language of action, he will so closely associate in the minds of his pupils descriptive phraseology with a great many familiar things, that they will be able readily to understand and express ideas about them.

To the substantives and adjectives with which the learner is acquainted, the instructor should join a variety of verbs, which may be explained either by his gestures, or by the actions represented in the engravings. The various relations in which he may place any two objects with respect to each other, or in which they stand in the engraved page, will afford sufficient opportunities for practising the prepositions in connection with nouns or pronouns. Adverbs and conjunctions will be gradually introduced as the progress of the learner and the circumstance demand. Thus, in the mother tongue, a young child, after having first named things, then qualities, then acts, uses the accessary words, and, at length, succeeds in clothing in appropriate language his impressions and feelings.

Detached words, being unavailable for the purpose of communication, would, as useless lumber, be soon forgotten. The foreign phraseology must, therefore, be the constant aim of the teacher; but, to effect this object, great caution is required on his part. He should, in the commencement, sometimes join to the same adjectives the names of different objects, and, conversely, to the same name different adjectives; he should, at other times, effect similar variations in connecting nouns with prepositions, nouns or pronouns with verbs, verbs with adverbs, so that short phrases may, by analogy, serve as a clue to each other. As these grow familiar to the child, longer sentences will be introduced. If, for example, there be placed before him a book which contains an engraving representing a young girl reading, he may be addressed in the foreign language, (accompanied by appropriate action), in words corresponding to the following:—*This is a nice book, I open the book, I shut the book, open the book,* &c.; *there are pictures in this book, here is a picture, a nice picture, here is a nice girl; she is sitting on a foot-stool and reading a book; here is the head of the little girl, her hand, her mouth,* &c.; *the right hand of the little girl is opened, I open my hand, I shut my hand, open your hand, your mouth, shut your mouth, your eyes,* &c., &c. Less

trifling subjects and less childish phraseology may be introduced with an adult learner.

The instructor must frequently repeat the same expressions, and always accompany them with looks, tones, gestures, and actions which explain them. The language of action, thus used comformably to the process of nature, is, as an explanatory means, preferable to translation, which would create confusion by the mixture of the two idioms, and will more effectually enable learners to understand, pronounce, and retain the foreign words expressive of the things submitted to the cognisance of their senses. If, however, the teacher speaks their language, native words and short explanations may occasionally be resorted to, when the foreign expressions do not admit of an interpretation exclusively addressed to their perceptive powers; for they should, above all, perfectly comprehend every sentence they hear, in order to take an interest in the lesson, and be able, in their turn, to apply it to the expression of their own ideas.

This course, which follows that of nature step by step, cannot fail, if persevered in for some time, to obtain the success which invariably attends the acquiring of the native tongue; but its benefit is not necessarily confined to young children; it would prove equally useful to all those who learn from a foreigner unacquainted with their language.

In the interval of the lessons, the children should, when practicable, be afforded frequent opportunities of hearing the words with which the lessons on objects have made them acquainted; they may be addressed in the foreign language on all the ordinary topics of family intercourse, the things or persons mentioned being always pointed to, when named for the first time. If, in addition to this practice, the parents are sufficiently acquainted with the colloquial phraseology of the language to use it in addressing familiar questions or observations to each other, let them do so within the hearing of their children, and instinctive imitation will advance the latter more than all the mnemonic lessons with which they might be teazed. They will soon be able to speak the foreign language; for the habit of hearing its words, on perceiving the things meant or pictorial representations of them, and of attending to the colloquial intercourse carried on in that language, will so closely and so indelibly associate in their minds the foreign phraseology with its corresponding ideas, that this phraseology will instantly recur to them whenever they wish to express the ideas.

The instructor, when engaged in the conversations on objects in the foreign language, will always have it in his power to bring under the consideration of his pupils the subjects most interesting to them, and which lead to the use of the expressions he thinks they most need. In these lessons he ought to proceed more slowly through the different stages of the conversations than would be requisite if they were conducted in a language already familiar to them; and he should particularly dwell, as a ground-work, on the first exercises, which consist in denominating objects, their parts, substance, colours, forms, size, number, and their various properties. It is, when following the natural process, a great step made towards the knowledge of a language, to be able to call familiar things by their names, and to distinguish them by the terms expressive of their qualities: the other words used in connection with these names are then rapidly acquired, and a further advance in the conversations on objects, or on pictures, presents no difficulty.

Concurrently with these exercises in perception, imitation, and analogy, just now recommended as an introduction to the practical knowledge of a foreign language, the parent or instructor should, when the children know how to read, daily translate for them a few pages of some very easy and entertaining book, their eyes being at the same time fixed on the foreign text. He should afterwards withdraw the book from their sight, and make them translate the same from his reading it to them; they should also learn the conjugations of the foreign verbs, and form simple and familiar phrases illustrative of them. For directions on these points we refer the reader to Book VII., Chap. II.; on the study of words, and to the first chapters of Books VIII., IX., and X., which treat of the initiatory exercises in translating, hearing, and speaking.

One hour a-day, divided into two or three portions, and devoted to these exercises for six months, would suffice to enable a child of the age of seven or eight to gain, in a foreign language, about the same degree of skill in understanding what is said and in speaking, as he possesses in his own,—these being the first two branches which are acquired by the natural course. An adult, who would submit to this apparently childish, but truly philosophical process, would, under a judicious teacher, accomplish this object in a much shorter period, the more so as he may, at the same time, pursue the course of reading unfolded in Book VIII.

SECT. IV.—ORDER OF STUDY, WHEN A FOREIGN LANGUAGE IS LEARNED THROUGH THE NATIVE AND THROUGH BOOKS.

A child, learning a foreign language under circumstances similar to those in which he acquired his own, may follow the order above mentioned; but the case is different with learners who have passed the age of childhood, and who study the language through their own as a branch of scholastic instruction, or who have not the advantage of an instructor's daily assistance: another course must, in this case, be adopted, as conformable, however, with that of nature as circumstances permit.

The comparative method, which art supplies as a substitute for the natural process, although generally less successful in imparting a practical knowledge of a language, possesses the advantage of being a better instrument of mental training, as was seen in Book III., Chap. III., Sect. II. The instinctive process of nature answers better for a living language, which is required as a means of social communication, since it secures a practical knowledge of it; but the artificial and comparative method is preferable for the learning of Latin, as it makes this language subservient to intellectual development, which is, at the present day, its most prominent sphere of usefulness. Latin was, it is true, learned practically as a living language some hundred years ago, because it was then a depository of knowledge and a general vehicle of thought; but things are changed, and Latin is no longer desirable for these two objects: to those who have now no better notion of the utility of the classics than that entertained by our ancestors, our humble advice is to spare themselves the labour of studying them.

Let us now see what is the order prescribed by the comparative method, and how the four branches may be rendered auxiliary to each other in the gradual advancement of the student.

The articulate and the written signs of language, being conventional, a familiarity with their import and form must be gained before they can be properly applied to the expression of thought; in other words, we must commence by receiving, not by communicating ideas. It is only after ideas have, by means of their signs, been *im*pressed on our minds, that we can, by imitation, *ex*press the same or analogous ideas in using the same signs. *Impression* of language, which is effected through

hearing and *reading*, must therefore precede *expression*, which is effected by *speaking* and *writing*.* This order is the more rational as the practice of the former two branches is considerably easier than that of the latter two: the arts of hearing and reading only require a previous slight acquaintance with the words and phraseology; and, in many instances, the object is attained by merely guessing. This is so true, especially as regards the power of understanding oral expression, that a child twelve or eighteen months old is already a proficient in it, who would be utterly incapable of improvement in any other department of language. In a foreign tongue, as in the native, we may, from the context, or by analogy, understand words which we never heard or saw before; we may also be directed to the meaning of a speaker or writer by a previous acquaintance with the subject; but, for the purpose of speaking and writing, neither the most acute sagacity, the most inventive powers, nor the most thorough knowledge of the subject will avail: not only should we previously know the words expressive of the ideas to be conveyed, but we should also be intimately acquainted with their various shades of meaning, their inflections, grammatical concord, syntactical arrangement, and idiomatic forms.

This is sufficiently proved by experience: the greater number of those who listen to orators in the pulpit, at the bar, or in public assemblies, would be utterly incapable of speaking for five minutes on the subjects treated by those orators, although they may understand them perfectly. Very few are those who can write with ease and correctness, in their own language, on even the simplest subjects, whilst tens of thousands read and clearly understand the popular works. Persons of an ordinary capacity and with an ordinary education are very nearly on an equality with the brightest geniuses and the most profound

* The word *hearing*, used in this Book to express one of the four subdivisions of the study of language, signifies both the action of the organ which perceives the impressions of articulate sounds, and that of the mind which conceives ideas from these sounds. The division of our subject and the absence of a better term have compelled us to attach this double meaning to it; and, in doing so, we are justified by the analogy which it bears with the words used to designate the three other branches. *Speaking*, its counterpart, implies both the act of uttering articulate sounds, and of expressing ideas through their means. *Reading* means, both to utter the articulate sounds represented by the written words, and to understand the ideas conveyed by them. *Writing* applies equally to the mechanical art of penmanship and to the mental operation of expressing ideas. The mental operation expressed by these words is the signification mostly attached to them throughout this work.

scholars, in the exercise of hearing or of reading; but the well-educated far surpass the ignorant in the power of speaking or writing: in fact, superior minds alone can approach perfection in these two arts. This remark applies with equal force to foreign idioms: they are often translated with considerable facility and correctness by persons who would be utterly unable to speak or write them with tolerable accuracy. "To clothe Cicero or Virgil in an English dress, is an office to which many are fully competent; but to render an English writer into Ciceronian prose or Virgilian hexameters would surpass the powers of the most accomplished classical scholar."*

Impression and *expression* constitute the double object of language, and mark the principal subdivision and order of the study. Correct impressions are received from proper models, and correct expressions are produced by a judicious imitation of them. Models are of two kinds, *men* and *books*. The child, while acquiring the native tongue, is under the influence which he receives from the former: the mother, the nurse, his elder brothers and sisters, in fact, all those who approach him, act as living models. If they speak correctly, the little imitator has the benefit of a good pronunciation and accurate expressions; if incorrectly, he adopts unconsciously a defective mode of speaking.

The *home*-learner of a foreign language has not usually the advantage of living models; for the professor cannot, in his occasional lessons, adequately supply the place of those by whom childhood is surrounded: he must, therefore, have recourse to books. The reading of foreign authors, by translation, becomes the ground-work of his study, as hearing is the ground-work in the native tongue. Books present great facilities for studying the language in the absence of the teacher: they can, in point of matter and style, as well as by means of explanations accompanying them, be adapted to a beginner, and to every degree of capacity and proficiency. That the highest degree of perfection in reading, exclusively of pronunciation, can be attained, independently of any assistance from an instructor, is proved by experience; for self-instructed persons commonly secure this object to the exclusion of the other departments of the study.

Books are a good substitute for men, when a language is learned away from the country where it is spoken. To read a work is to listen to its author; a language is then learned as

* Alexander Crombie, *Gymnasium, sive symbolica Critica.* Pref.

practically and imitatively, by reading books, as by listening to men. The analogy between these two modes of proceeding is complete: translating the foreign books into the native tongue interprets the foreign idiom to the beginner, as the language of action interprets to the infant the meaning of the persons who speak the vernacular within his hearing. The one is learned from the writers as the other from the speakers.

In the vernacular tongue, the child left to himself acquires the pronunciation with the import of oral expression, as a natural consequence of his hearing it habitually, and remains ignorant of the written signs, which he subsequently learns by a special course of instruction based on his knowledge of the spoken words. In a similar way, but inverted order, the person who begins the study of a second language through the medium of books, gains at first a familiarity with its written form; he must, afterwards, by suitable exercises in hearing, be taught the import and pronunciation of the spoken words corresponding to the written words with which he is acquainted.

In the foreign, as in the native tongue, these two points,—*reading and hearing*,—are the most important, both as ultimate objects and as means of learning to speak and write. We must have long observed, in books and in conversation, what ideas people attach to words, before we can, in our turn, use these conventional signs in speaking or writing. *Reading* and *hearing* must, in a practical method, first be aimed at, as being the means through which *imitation*—the first law which presides over the acquisition of language—enables us to gain the power of *speaking and writing*. The study of the latter two branches will afterwards afford learners the opportunity of applying the second law,—*analogy*. The comprehension of what is written and spoken affords also the means of analysing speech and deducing the science of language: it thus becomes the foundation on which is raised the reconstruction of it; analysis leads to synthesis.

The four branches rank in importance as follows:—

1st branch—Reading;
2nd branch—Hearing;
3rd branch—Speaking;
4th branch—Writing.

The first two branches constitute the double power of conceiving ideas from the *impression* of their signs on the brain; the other two, the power of using these signs as the *expression* of thought.

CHAPTER II.

OF IMPRESSION.

SECT. I.—READING—THE FIRST BRANCH IN IMPORTANCE.

Reading, the first branch to be attended to, is that operation of the mind by which ideas are attached to the written words as the eye glances over them.

We have here nothing to do with the uttering of sounds previously known on perceiving the written words which represent them. This first step in the art, a purely mechanical operation, serves, in the native tongue, as a means of passing from the spoken language to a knowledge of its written form; but it is not practicable at the entrance upon the study of a foreign tongue; for, in this, the learner is not, as in his own, already in possession of its pronunciation, which he might apply to the words of the book.

When the practice of this art embraces both the mechanical and the intellectual parts combined, it constitutes the accomplishment of *oral reading*, of which we shall treat in the Book on *Hearing*. But, as one of the great subdivisions of the study of language, reading consists in the power of conceiving, either by translation or directly, the ideas expressed by the written language, of benefiting by the experience of others, as conveyed in their writings, of imbibing their thoughts and sentiments, their words and their style. It is in this latter sense that, throughout this work, we use the word *reading*.

This art claims precedence over the other three departments of a foreign language, not only because it is the easiest, but because it surpasses them in the number and importance of its benefits; it is the most useful and the most available in ordinary circumstances; it can be pursued with or without a teacher, and practised at home or abroad; it offers the readiest means of instruction at any period of the study; it is subservient to improvement in the native tongue; it is the

ground-work on which grammar, etymology, and philology may be effectually studied; it alone affords the means of ascertaining the various acceptations of words, and storing the mind with knowledge; it cultivates the taste and procures mental enjoyment; finally, it enables the professor, by the explanation and analysis of standard authors, to impart most valuable information to his pupils, whilst the exercise of oral and written translation from these authors unfold most effectually the highest powers of reason. These various benefits, arising from the practice and knowledge of reading, will be elicited in the second part of this work.

The importance of reading, as one of the great ends of the study of language, is considerably increased by its being a means of acquiring the other departments of a foreign idiom, and more especially, the power of understanding oral discourse; for, when a learner has gained familiarity with the written words, he requires but little practice in hearing to be able to understand them when spoken. In fact, reading leads to hearing in the foreign language, as hearing leads to reading in the native.

In the dead languages reading is all that is really required, now that these are no longer used for international communication in political, literary, or scientific correspondence, as they were some hundred years ago; and, from an acquaintance alone with the ancient writers, can be derived all the intellectual advantages which are expected from classical instruction. The Eastern languages which are studied in view of comparative grammar, or of philological and historical researches, need also to be understood only in their written form. With regard to living languages, they are learned by many who do not visit the countries where they are spoken, or have no opportunities of conversing with the natives of those countries; whereas books are always at hand, and he who can read them, may, whenever he thinks proper, hold intercourse with the most intellectual and enlightened portion of the nation to which they belong.

The capability of reading living languages so as to understand them, which is without comparison more easily acquired than that of writing them, would, if generally diffused among nations, accomplish all the purposes of correspondence between men of different countries; because each person, writing in his own language, would then be likely to be understood abroad. All

international transactions would thereby be greatly facilitated; diplomatists, scientific men, and merchants, especially, would derive incalculable advantage from the power of reading living languages; for they would then have no occasion in their foreign correspondence for translators or special clerks, who frequently misrepresent the ideas of their employers, and, more frequently still, write so inaccurately as considerably to perplex their correspondents abroad. Thus would the well educated in all countries be afforded a ready means of interchanging thoughts and, entering into that community of feelings which is so desirable for the advancement and well-being of society. International communication has, until now, been much impeded by the extreme difficulty attendant upon writing a foreign language, and by the misunderstandings arising to the reader from incorrect compositions. Very seldom could a person be sure of conveying his meaning in it with as much clearness and precision as in his own; and, if he had correspondents in various countries, it is more likely they could read his language than that he could write their different idioms so as to be perfectly understood.

Few of those who study dead or living languages persevere until they are completely acquired. The greater number, owing to the tediousness and consequent expence attendant on the old system, stop in the middle of their course, and retain nothing of their past study but the painful recollection of the misery it inflicted on them. Had they turned their best efforts to reading, they would most probably have mastered it in the time which they wasted in vainly aiming at several objects of comparatively minor importance in the language; and this point once gained, it would be a good foundation for acquiring the other branches at a subsequent period, if they had the leisure and the wish to attend to them.

The art of reading living languages has also this great advantage over the other branches, that as books can always be procured, it is, in most cases, within the power of the proficient to practise it with a view to instruction or amusement, and thus to preserve its possession to the latest period of life; whereas the capability of speaking and writing a foreign language is easily lost for want of the opportunities to bring these acquirements into practice.

SECT. II.—READING—A MEANS OF ACQUIRING THE MATERIALS OF LANGUAGE.

The efficiency of reading, considered as a means of acquiring the materials of language for oral or written expression, is undeniable, and shows itself even in the native tongue, although the reader is already habituated to a familiar language, which tends to counteract the impressions that he receives from works written in a style more elevated than that of conversation. In fact, no one can possess superior powers of speech who has not read much; for it is chiefly from books that scientific, classical, and elegant expressions are obtained. The influence of books must be greater in a second language, as the expressions of the foreign author come into the mind without having to contend with others previously acquired; they strike it with all the force of first impressions.

The power of imitation, that innate propensity, so active especially in early life, prompts us to use the forms of speech rendered familiar by frequent repetition, and associated in the mind with the ideas which they represent. Moreover, extensive and attentive reading, by presenting the words in various situations and in different acceptations, gives a clear notion of their real value, impresses them in the memory, and thus furnishes materials for speaking and writing. The more extensive and diversified the reading, the more likely will the learner be to become acquainted with all the words and their various import. Even those who learn a language exclusively for the purpose of conversation require to read it a great deal.

It is by studying the works of their predecessors that the most distinguished writers in every age have risen to celebrity. Many of them have declared this fact; others, anxious to give us the benefit of their own experience in the prosecution of their studies, have warmly recommended reading as the basis of improvement in a language.

Among the many authorities which we could adduce in favour of this practice, we select a few: "Plato," says Longinus, who advocates the same opinion, "has taught us that the surest mode of attaining to perfection in style is to imitate and emulate the illustrious writers who preceded us."* Erasmus, the most distinguished scholar of the sixteenth century, asserts that "the true

* *Treatise on the Sublime.*

way to speak correctly, is to live and converse with those who speak well and to read good authors."* The learned society of Port-Royal held this doctrine and practised it: one of its most eminent members, Nicole, expresses himself in these terms, "The great secret for enabling children to understand Latin, is to put them early into the reading of books and to exercise them much in translating them."† "Let the learner, above all," says Dean Colet, "learn and read good Latin authors, and note wisely how they wrote and spake; and study always to follow them, desiring none other rules but their examples."‡ "What precepts," exclaims D'Alembert, "are preferable to the study of the great models?"§ Nugent observes, "Languages can be learned only by practice, and practice is nothing but a continual repetition of the same words applied in a hundred different ways and on a hundred occasions. But this practice, with regard to the dead Languages, can only be had in the ancient authors."‖ "The explanation of authors," says Suzanne, "is the easiest, shortest, and least irksome way to learn the meaning of words, the rules of syntax, and the niceties of the language."¶ Voltaire also says, "The assiduous reading of good writers will be more useful for the formation of a pure and correct style than the study of the majority of our grammars."** Dugald Stewart observes, "As the air and manner of a gentleman can be acquired only by living habitually in the best society, so grace in composition must be attained by a habitual acquaintance with classical writers."††

Cicero, Quintilian, Milton, Locke, Rollin, and many others might be quoted in favour of this opinion; but the few authorities we have mentioned may, for the present, suffice to show that we are not unsupported in assigning to reading the first place in the study, as being the most efficient means of improvement in acquiring a foreign language. Further proofs of this truth will naturally find their place in the next Book, when we treat of the inefficiency of grammar towards this object.

Nature, reason, and experience proclaim this order, *example before precept*. Reading, that is, the study of models or examples, must then precede the writing of exercises, which demands a

* *De Pueris ad Virtutem et Litteras.*
† *Essais de Morale.—De l'Education d'un Prince.*
‡ *Address to the Masters of St. Paul's School.*
§ *Mélanges de Littérature.—Observations sur l'Art de traduire.*
‖ *Greek Primitives.* ¶ *Traité d'Education publique et privée.*
** *Mélanges littéraires.—Langage.*
†† *Elements of the Philosophy of the Human Mind.*

knowledge of rules or precepts; yet it frequently happens th this order is reversed, and that writing a foreign language, composing by rules, is practised at the outset, under the erroneous impression that it accelerates the acquisition of the first branch—*reading*—a mode of proceeding directly in opposition to the educational axiom, that the means ought to be consistent with the end.

In a foreign idiom, as in the native, the comprehending of books is altogether independent of the ability to write. Innumerable instances could be adduced of persons who, although unskilful writers in their own language, are able, from assiduous and extensive reading, not only to understand literary productions, but also to derive pleasure from beauty of style. To write may assist in learning to speak, because there is some analogy in the performance of these two arts; but it is preposterous to suppose that it can assist in acquiring the very opposite art—reading. It cannot either, as is sometimes asserted, lead to a clear conception of the distinctive meanings of words, or to a knowledge of the idiomatic construction; it is the converse of this proposition which is true,—a previous knowledge of the words and idioms is indispensable for writing. It would be considered unreasonable to attempt to write in the native tongue before being able to read it, or to make a young child form his vernacular phrases from given rules of grammar; how much more unreasonable, how absurd is it to compel a learner to write exercises in a language which he not only cannot speak, but with the words and phraseology of which he has not yet been made acquainted by either reading or hearing. This subject will be more fully elucidated in treating of grammatical exercises.

In support of early writing, it is often adduced that it fixes the foreign expression on the memory. This assertion, which is far from being generally assented to (see Book VIII., Chap. II., Sect. XI.,) does not, even admitting its efficiency for some learners, justify the adoption of this unnatural course for the Latin, because this language is not usually learned with a view to be spoken or written in after-life; and, consequently, there is need only of that acquaintance with its words, which is required for reading the classics. It will be fully proved, we hope, in Book VII., Chap. II., Sect. II. and III., that this acquaintance with the words of a language is gained with more rapidity and certainty by reading than by the tedious process of writing.

Writing previously to reading has now, in the case of Latin

and Greek, been in great measure superseded by the conjoint practice of these two exercises; but we believe it is still a favourite order of study among teachers of living languages. This cannot excite surprise: foreigners, not being in general proficients in the language of their pupils, feel incompetent to assist them in finding out the most appropriate expressions for translating the foreign authors; consequently they are inclined to neglect translation, and to prefer the writing of grammatical exercises. The correction of these bringing into action their knowledge of the foreign language, gives to their services some appearance of utility; but, in reality, they only retard the learner's progress in the first three branches, without advancing them in the fourth. The time which, in the absence of the professor, is consumed by writing, leaves little leisure to the pupils for attending to the more important occupation of reading; and the correction of exercises engrosses a portion of the instructor's time which would be better employed in explaining the ancient classics, or attending to the art of speaking a living language.

SEC. III.—READING—A MEANS OF ACQUIRING KNOWLEDGE.

Books, as the depositories of human knowledge, are to communities what parental testimony is to the child: they supply the wants and deficiencies incident to our condition, by furnishing us with the means of appealing, in the search of truth, from private judgments to the testimony of mankind; they contain all the mental treasures which generations bequeath to succeeding generations. Standard works are the most available and the most efficient means of instruction in every walk of literature and science. The variety of information which a proper course of reading brings under the consideration of a learner, and the opportunities which it affords him of surmounting the intricacies of different styles, will extend his power of comprehending both the written and the spoken language, and secure the means of deriving advantage from an intercourse with the well-informed. The greater the number of subjects we have studied, the more varied are the conversations we are able to follow or take a part in. This is true with respect to a foreign language as well as to our own.

Reading is conducive to improvement in the different branches of education and the various avocations of social life. A few

words from eminent writers will firmly establish this truth. "A young man," says Dr. Johnson, "should read five hours a day, and so may acquire a great deal of knowledge."* "The ideas which are acquired from reading are the germ of almost every discovery."† "We become well informed only by our own reflections. It is the habit and the choice of reading which keep up a taste for the beautiful and the love of truth."‡ "Though I should fatigue my readers, I will again repeat that the most profitable lessons are those which are received from books."§ If it be true that the company we keep is indicative of our morals, it is equally true that the books we read are indicative of our minds.

Those who take pleasure in reading, and can devote some time to that occupation, may, according to their tastes or professions, find abundance of interesting and useful information in the stores of the dead languages, and more particularly in those of the living; for the arts and sciences which are every day advancing and spreading among all classes, having deserted the Latin tongue for its modern and more popular rivals, have of late considerably enriched the literature of European nations. And here we may venture to say, that of all the continental languages, the French and the German are those which present the most copious sources of information in every department of human knowledge.

The languages of such modern nations as have distinguished themselves, and have reached a high rank in civilisation, claim our serious attention; for in their works are accumulated the wisdom and knowledge of all ages, from what is most valuable in the writings of the Greeks and Romans down to the most recent discoveries. We must consult them if we wish to add to our limited experience that of past generations.

The people with whom these languages enable us to converse having different origins, living in different climates, being surrounded by different natural objects, brought up with different habits, and governed by different laws, must have ideas and opinions different from ours. Their writers must see in a different light many subjects of which they treat in common with our national authors. In history, in politics, in belles-

* James Boswell, *Life of Johnson.*
† J. D'Alembert, *Encyclopédie—Discours Préliminaire.*
‡ J. F. Laharpe, *Cours de Littérature—Introduction.*
§ J. F. Lacroix, *Essais sur l'Enseignement.*

lettres, in the arts, and in many other departments of knowledge, their notions often widely differ from ours. The reading of their works will, therefore, enlarge our sphere of thought, increase our information, and remove many prejudices which would otherwise continue to cloud the mind.

Even imaginative compositions, those of the most approved writers in every country, seldom fail to arouse in the hearts of the readers lofty and noble aspirations; while they depict our evil passions under colourings and in situations which excite a wholesome dread of their pernicious bondage, they widen the circle of our kindly sympathies, they enrich our minds with vivid descriptions of localities and pictures of national manners, they make us acquainted with human character in all its varieties, and impart a more complete appreciation of all that is great and good.

In short, the continual and careful reading of good works in different languages has a most beneficial influence: it exercises the attention, enriches the memory, expands the imagination, forms the taste, improves the judgment, stores the mind with knowledge, gives habits of study, and leads, by the force of imitation, to the highest conceptions and to the performance of all good and noble actions. By habitual communication with superior spirits, we not only are enabled to think their thoughts, speak their language, and feel their emotions, but our own thoughts are refined, our conversational powers are improved, our common feelings are elevated; and though we may never attain their standard, yet by keeping company with them we rise above our own.

SECT. IV.—READING—A MEANS OF INTELLECTUAL ENJOYMENT.

Reading is, perhaps, the most attractive part of the study of a foreign language. The labour bestowed on it, besides contributing to advancement in the language, is always accompanied by a further reward when the book is interesting or instructive. Attention is sustained by the succession of ideas, and curiosity gratified by the constant discovery of new words. As the facility of understanding increases, so does the pleasure arising from reading, and, with it, the taste and fondness for the occupation.

To the well-informed reader there is no delight so pure, so absorbing, as that which is derived from books; far beneath it

are the vaunted gratifications of the sensualist. Reading unfailingly relaxes the mind, when weighed down with the toilsome occupations of life; similar in its effects to the unbending of the bow, it enables us to return with renewed vigour to the most laborious duties. It pours balm into the troubled spirit; and, by its insinuating charm, gradually cheers the imagination from the heavy thoughts of affliction. When we are eagerly engaged in perusing eminent productions, the fascinating idea steals on us that we are enjoying the conversation of their authors, and gathering from their lips the vivid and eloquent effusions of their creative genius; and, if their society be thus often indulged in, it insensibly infuses into our minds a portion of their own refinement. To the illiterate, the union of unbounded usefulness and exquisite pleasure, which is found in the occupation of reading, may seem incomprehensible; but to a person of literary taste, no language could appear exaggerated which would adequately pourtray its intellectual benefits.

The pleasure of study, different from most other pleasures of life, is independent of fortune, of health, of the inclemencies of the weather, and of the caprice of our fellow-men: it can be procured under all circumstances. "There is in the world," says the celebrated historian, Augustin Thierry, "something preferable to sensual gratification, superior to fortune, better than health itself—it is an ardent love for science."* In the consciousness of the vicissitudes of human affairs, parents ought, in common prudence, to cultivate in their children a taste for reading. There is no man so high in station as to be enabled to dispense with the occupation, and no man so humble as to be compelled to forego it. Every new language which is learned, diversifies and multiplies indefinitely this intellectual pleasure.

The art of reading continues to procure enjoyment to the latest period of life, when all others have been long abandoned. It seems even to increase as the physical faculties lose from age their power of action. Madame De Sévigné, in her sixtieth year, acknowledged that she then owed to the reading of good books pleasures far surpassing those which she ever enjoyed in the world or at court. Lord Chesterfield had passed that age, when he made a similar acknowledgment. "Reading," he says, "which was always a pleasure to me, is now become my only refuge."† As means of cheering solitude and alleviating human sufferings, books are still more powerful: there is not an afflic-

* *Etudes Historiques*, Pref. † *Letters to his Son*, Let. 305.

tion which they cannot overcome. How many men of cultivated mind are there, the victims of political dissensions, who, in the horrors of a prison, have obtained from books the sweetest consolations, and even the momentary forgetfulness of the dreadful fate which awaited them. In fact, in prosperous as in adverse fortune, in the highest as in the humblest situations, reading is always productive of good. Montesquieu declares that study was to him a sovereign remedy against the ills of life. "I never had any sorrow," he adds, "which an hour of reading did not remove."* Lord Byron remarks, in his 'Journal,' "If I could always read, I should never feel the want of society."† "As much company as I have kept," says Pope, "and as much as I love it, I love reading better, and would rather be employed in reading than in the most agreeable conversation."‡ "But for books," said Jefferson, "life would scarcely be worth having."§ Fénélon emphatically exclaimed, that he "would not exchange the love of reading for any earthly enjoyment."‖

SECT. V.—READING AND HEARING COMPARED.

Good books are the best companions of our leisure hours: we can, at any time, have recourse to them, and select one from which, as we feel inclined, we may derive either amusement or instruction. The same cannot be said of men: we cannot always command their services when we are best disposed to receive information from them; and it seldom happens that our anxiety for instruction is gratified in our usual round of visits, or by those whom we generally meet in society.

Sir Walter Scott says, in one of his works, that he never met with any man, let his calling be what it might, even the most stupid fellow that ever rubbed down a horse, from whom he could not, by a few moments' conversation, learn something which he did not before know and which was valuable to him. It will be acknowledged that, by proper management, something might be learned from every person, but how few could, like Walter Scott, draw forth from another the particular knowledge which he possesses, and, besides, such information, the fruit of individual experience, relates only to the common affairs of life,

* *Son Portrait par lui-même.* † Moore, *Life of Byron.*
‡ Th. Moore, *Life of Byron*, Note. § *Correspondence.*
‖ L. S. Fénélon, *Conversations avec le Chevalier Ramsay.*

and can be but very superficial. The use of books opens a wider range of ideas and leads to greater investigation of science: if we wish to be profound in any species of knowledge we must have recourse to books.

We have a greater command over what we read than over what we hear. In reading we can pause at will and direct the powers of reflection to the passages which it is essential to investigate and remember. At any part of the book we can compare what is there the object of consideration with what precedes; and thus the subject is better connected in the mind and more thoroughly understood. In listening, on the contrary, the slowness of our conception, or the rapidity of the speaker, does not always permit us to follow him. We have not time to dwell on the words or ideas that call for examination, and much less can we retrace our steps, in order to compare the different parts of the subject presented to our consideration. Besides, the information gathered from conversation cannot generally be relied upon with the same certainty as that which is found in standard didactic works.

Books, as models, are preferable to men: not only they present a richer stock of words and a style generally less defective and less trivial than that of conversation, but the impressions made through the organ of sight are more vivid and more lasting than those which are made through the organ of hearing; for the attention is more firmly captivated by the eyes than by the ears. This observation applies only to the form of language, not to the thought, which, by the force of sympathy, receives from the living voice a power of impressiveness, of which the inert page is altogether destitute. The rapidity with which all the articulate words succeed each other requires them to be repeated very often, in order to be retained; the written words, on the contrary, can be dwelt upon at will by the organ of sight, and the same repetition of the impressions is not required in order to retain them. "Whatever is acquired through the ear," says Horace, "makes a fainter impression on the mind than what is conveyed to it through the faithful eyes."* Dugald Stewart makes a similar observation: "Visible objects," he remarks, "are remembered more easily than those of any of our senses, and hence it is, that the bulk of mankind are more aided in their recollection by the impressions made on the eye than by those made on the ear."†

* *De Arte Poetica.*

† *Elem. of the Philosophy of the Human Mind.*

Viewed in other respects, reading and hearing are equally useful at the entrance upon the study. As the practice of reading leads to the acquisition of three important objects, namely, *to the comprehending of books*, the *orthography*, and the *materials of language*, so the practice in hearing leads, in a similar way, to *the comprehending of men*, *the pronunciation*, and *the materials of language*. The latter result, common to both branches, is strikingly illustrated by the opposite fact, that persons in humble life, who do not read, nor mix in society, have but a very limited stock of words; and these are of the most common kind. In the native tongue these two means of extending our vocabulary are practicable; but, in acquiring a foreign language, reading is, in ordinary circumstances, the only means within the power of the learner who is with his books more than with his teacher; and, hence, it becomes the fundamental branch of study.

The attention of learners should then, at first, be chiefly directed towards acquiring a clear comprehension of books; but, in thus insisting on giving precedence to this branch, we do not mean to disregard the other three, without which the knowledge of the language would be very incomplete; we only wish to indicate the progressive order which ought to be followed in the study. Nor do we mean that each of these branches should be learned separately, passing to the second only after thoroughly possessing the first, and so on in succession, but that the efforts of the learner ought to be more particularly directed, at the outset, towards reading, which, in a foreign language, is the easiest and the most useful branch, either as an ultimate object, or as an auxiliary in acquiring the others. The exercises in hearing, requisite for understanding the spoken language, may soon after be entered upon, and, if duly carried on concurrently with reading, they will soon secure a mastery of the second branch. That, in general, learners understand the written language sooner and better than the spoken, is merely because they have more practice in reading than in hearing. The 3rd and 4th branches,—*speaking* and *writing*,—will successively follow, as familiarity with the first two gradually enables the learner to divide his attention between them all; and, at last, the four branches will be simultaneously attended to, until the complete possession of them is gained. It is in this manner that we proceed in the vernacular tongue in which our powers of hearing and reading are always in advance of the powers of speaking and writing.

SECT. VI.—HEARING—ITS IMPORTANCE.

The second branch,—the art of comprehending the language on hearing it spoken,—will be entered upon when some progress has been made in the first, and will then be the more rapidly acquired as greater proficiency has been gained in reading. At the same time that the pupils acquire through their own efforts familiarity with the *written language*, they avail themselves of the assistance of a professor, by attending, when with him, to the *spoken language*, which they could not learn in his absence; for, if the acquisition of the written language—*reading* and *writing*, depends on the persevering industry of the learners, that of the spoken language—*hearing* and *speaking*, chiefly depends on the continual exertion of the teacher. It is his peculiar office to initiate them into these two branches.

Hearing will prove indispensable to those who may have occasion to speak the foreign language; for it is the most important part of our communication with others: it is truly the better half of conversation. Its complete acquisition is vastly more useful than that of speaking. We may often, with a limited command of words, aided by circumlocution and the language of action, succeed in conveying our meaning to others; but nothing short of perfection in understanding oral expression will do for the necessities of social intercourse. If we comprehend perfectly what is said, a few words, a monosyllable, even the slightest motion of assent or dissent, will suffice to keep up the conversation. But if, on the contrary, we do not clearly and fully comprehend the person who addresses us, all the command of language which we may possess will be unavailable to keep up the intercourse. Hence hearing may be useful independently of speaking, whereas speaking is useless without hearing.

Not to understand perfectly what is addressed to us, places us in a most awkward position; we know not what countenance to assume, what answer to give. Sometimes we may fancy we have caught the speaker's idea, and we venture on a reply which, by its incongruity, only proves more awkward than our silence. To the person who addresses us, it must be equally distressing not to perceive in our countenance the expressive looks that bespeak the internal action of a mind which comprehends what is said. He must speak more slowly and plainly than usual, or depart from his natural style, in

order to use expressions which may be on a level with our limited knowledge of the language. Such a conversation is equally painful to the speaker and to the hearer.

When a person understands the spoken language of the country which he visits, he is enabled, from the moment of his arrival, not only to enjoy the society of the people, but also to improve in speaking; for he easily and permanently retains words and entire phrases, when his ear distinctly catches and his mind clearly conceives them; he readily uses them afterwards in the way he has heard them applied. In fact, the art of speaking a foreign language presents little difficulty to him who understands it when spoken. With the possession of this second branch, two or three months would be sufficient to learn how to converse with great ease; deprived of it, we might be years in the country without being able to join in conversation, and much less to retain the foreign expressions which strike the ear. "He that travelleth into a country," says Lord Bacon, "before he hath some entrance into the language, goeth to school, not to travel."*

As it has been remarked that the art of reading foreign languages would, if generally practised, extend the benefit of correspondence, so the power of understanding their oral expression, which is, as will subsequently be seen, of very easy attainment to persons able to read these languages, would considerably facilitate personal intercourse between the natives of different countries, because each speaking his own language would be understood by the other. We submit this idea to scientific associations and to the Peace Congress, as calculated to aid, by its realisation, their generous efforts in the great cause of the advancement of humanity; the reciprocal understanding of foreign languages is conducive to the diffusion of knowledge, to the community of feelings amongst mankind, and more than any other intellectual progress, will bind together the human race. International communion is the great desideratum of the present age.

Wilkins, Leibnitz, l'Abbé de St. Pierre, Volney, and many other philanthropists, impressed with the vast importance of the benefits which would accrue to humanity from a universal language, have devised schemes for the practicability of such a vehicle of thought. Their efforts, however, have as yet proved unsuccessful; and it is not likely that any system of

* *Essays*, *Ess.* 18.

signs will ever be contrived, which could be generally adopted among the various nations of the earth; too many obstacles tend to defeat the execution of such a project. Descartes considers it as visionary, at the same time that he admits the possibility of contriving a more philosophical language than any now in existence.*

The elements of a universal language, which to be available should be restricted to ideographical writing, would, like the Chinese characters, present very great difficulty in their acquisition. A familiarity with them could not be gained by practice in hearing or reading; they must be learned abstractedly and unconnectedly,—a very tedious and painful task. But should a person even surmount the difficulty of their acquisition, he would often, when using them in conformity with his habits of vernacular expression, fail to make himself understood by the natives of another country, on account of the difference which in general exists in the grammatical and idiomatical structure of languages. Besides, the advantages to be expected from such a language would not, in the present state of things, be adequate to the labour and length of time consumed in the study; for, not only would oral expression be excluded from its sphere of usefulness, but its possessor would not find in the new characters a literature from which to derive instruction or procure intellectual enjoyment—the chief motives for learning a second written language; nor could he always be certain of having for a correspondent a person conversant with them; and the want of practice, arising from the absence of books and the probable rarity of correspondence, must cause him soon to forget this written language, or rather must be an obstacle to his ever acquiring it. With regard to the partial use of such a language among the learned of different countries, were it even practicable, it would be most prejudicial to society at large; for, as with the usual hieroglyphics in ancient Egypt, much valuable information would then be shut out from the great majority of the people.†

The general diffusion of the arts of reading and hearing foreign languages would obviate all these difficulties; for the power of understanding two or three of the most extensive among the

* See R. Descartes, *Lettre au Rév. Père Mersenne.*

† The institution of a universal language presents many other obstacles which our limits do not permit us to investigate. See, on this subject, "*Des Signes et de l'Art de Penser considérés dans leurs Rapports mutuels.*"—J. M. Degérando.

languages, would, for the great majority of persons, answer nearly all the purposes of a universal idiom; and the acquisition of the first two branches in any one of them is so easy that it has been frequently accomplished in less than a year, and, in some instances, in less than six months; so that one could learn how to understand perfectly half a dozen languages, both written and spoken, in much less time than would be required for learning to speak and write one with ease and correctness. Many facts and arguments illustrative of this assertion will be subsequently adduced in treating of the acquisition of this branch.

When we are abroad among those whose language we have studied, we have a thousand occasions of hearing them speak, a thousand opportunities of deriving pleasure and profit from understanding them; but comparatively few are the circumstances which require us to speak their language. Whether we travel in a public coach or sit at a table d'hôte, it is often instructive and always prudent to allow others to speak; for we gain a great deal of local information, and soon know in whose company we are. The inexperienced and the unthinking are ever ready to tell who they are, whence they come, whither they go; but sensible people, at home or abroad, are generally more inclined to listen than to talk, when they are among strangers.

Whatever may be our pursuit in a foreign land, whether business, instruction, or amusement, we constantly have to exercise the precious faculty of hearing, almost to the exclusion of speaking; for, whether we attend sermons, lectures, or plays, the debates in the Houses of Parliament, or in the Courts of Justice, everywhere silence is imposed on us. If we visit museums or public buildings, we are doomed to hear the cicerone's oft-repeated tale; if we enter a shop, we have again to listen to the tradesman expatiating on the merits and cheapness of his goods; in short, in all circumstances we have less to say than to hear.

If we frequent society, we shall generally find that the practice of attending to what is addressed to us, and following the conversation of the well informed, is far more useful and less dangerous than an over-anxiety to speak. To know how to listen is a social quality, as rare as it is valuable. We neglect, we despise, too much the art of listening. He who listens well, thinks equally well. Conversation is like the wind, which

carries seeds with it and scatters them in its passage.* Pythagoras imposed on his disciples a silence of five years, before they were permitted to address him.

SECT. VII.—HEARING—A MEANS OF ACQUIRING THE PRONUNCIATION.

Understanding the people will not be the only object gained if the professor often afford his pupils the opportunity of hearing him. The pronunciation will then be retained without difficulty; for it must not be forgotten that the power of producing the articulate sounds of any language depends entirely on the frequency of the impressions which they have made on the ear. Those are dumb to whom nature has denied the sense of hearing. Such is the force of the instinctive power of imitation in childhood, that we unwittingly acquire the pronunciation and prosody of the vernacular tongue, while attention is directed to the ideas conveyed by oral expression. Hence the precept of Quintilian, who recommends to place near children only persons who speak correctly.

The plain, direct, and natural method, by which the ear is attuned to the native sounds, and the vocal organs learn to produce them, is equally applicable to a foreign language. If it were strictly and patiently followed, the pronunciation of that language would be as easily attained as that of the native tongue. If, in general, this part of a living language is found so extremely difficult, it is simply because the method pursued to acquire it is in opposition to that of nature. We disdain to follow the easy path she has marked out for us, and we are punished by fatigue and disappointment.

It is a great error to think that, in the study of a living language, exercises in pronunciation ought to be introduced at the outset. In the natural process, the act of pronouncing is, as we have seen, only the second step; in a foreign language, it is the third: the learner must first be exercised in translating that language, then in hearing, and, afterwards, in pronouncing it. He must understand the spoken words before he attempts to utter them; for it is contrary to reason, to learn signs of any kind before ascertaining what they signify. The young child attempts to pronounce only the words or phrases to which he attaches a meaning. The knowledge of the pronunciation of a word is useful only inasmuch as its meaning is known; and it is

* See J. M. Degérando, *Des Signes et de l'Art de Penser*, &c.

the association of that meaning with the sound which impresses the pronunciation on the memory. On the other hand, the pronunciation of many words depends on their signification. For example, *august, minute, invalid; use, conduct, rebel,* are pronounced in two ways, according as the first three are substantives or adjectives, and the other three substantives or verbs. Among other words which differ in pronunciation as they differ in meaning may be mentioned the following, in English, and in French.

bow (an act of reverence).	*bow* (an instrument of war).
gill (a measure).	*gill* (of a fish).
read (present tense).	*read* (past tense).
desert (wilderness).	*desert* (merit).
gallant (brave).	*gallant* (attentive to the ladies).
to conjure (to practise charms).	*to conjure* (to beseech).
tous (all, an adjective).	*tous* (all, a pronoun).
fils (threads).	*fils* (son).
fier (to trust).	*fier* (proud).
portions (portions).	*portions* (we were carrying).
parent (parent).	*parent* (they adorn).
convient (becomes, agrees).	*convient* (they invite).

The Italian *seguito* and the Spanish *publico,* take the prosodiac accent on the first, the second, or the third syllable, according as these words respectively mean, the one, *sequel, followed* (part. past), or *he followed;* the other, *the public, I publish,* or *he published.*

In acquiring the pronunciation, as in every department of instruction, prevention is better than cure: by not practising any pronunciation, the organs are left ready for acquiring a good one; but bad habits once contracted are with difficulty eradicated. The task of the professor should then consist less in correcting his pupil's errors, than in preventing him from committing any. Although it is impossible to acquire a language without committing errors in the commencement, yet there is no necessity of forming bad habits, as it were, solely for the trouble of getting rid of them afterwards, when it is practicable to acquire at once, correctly, the desired object.

This observation does not apply so much to phraseology as to pronunciation: in the latter the elements being very limited recur frequently in practice, so that habits are soon formed, from the unavoidable repetition of the same sounds and articulations. But a defective phraseology is not so liable to become habitual:

the same identical forms are not often used, because the elements of which they are composed are extremely numerous, and the modifications which they undergo, like the circumstances that call them forth, are infinite.

To guard from erroneous sounds learners must frequently hear the language correctly pronounced, before they attempt to pronounce it themselves: there can be no doubt that success in this department depends, in the beginning, more on the ear than on the tongue. They will acquire a more correct pronunciation by hearing a foreigner read fifty pages of his own language, than by reading five hundred to him.

If adults, when abroad, seldom succeed in speaking like the natives, it is simply because having, from the exigencies of their position, to take an active part in social intercourse, they avail themselves of the little they know of the foreign language, in order to communicate with those near whom business or pleasure brings them. They are placed in circumstances different from those of a young child: they are obliged to speak before they have sufficiently heard the words which they have occasion to use.

We would remind those who learn a foreign language in the country where it is spoken, that the people being then their principal models they should seek their society, live habitually with them, and, in their first intercourse with them, be more anxious to listen than to speak. They should avail themselves of every opportunity to hear the language spoken by the well educated natives. Public speakers in every walk of oratory, preachers, lecturers, actors on the stage, lawyers at the bar, legislators in the Houses of Parliament, would be their best teachers. They should, in fact, make their case as similar as possible to that of the child who, in the same pursuit, prompted by the instinct of curiosity, listens, and depends on his hearing the words for using them afterwards. He is, in truth, but a passive learner, on whom society acts as a teacher.

Pronunciation is a part of the third branch: it is an essential element of *expression;* but, as it is a necessary consequence of hearing, our observations on this point naturally found their place in the present chapter.

CHAPTER III.

OF EXPRESSION.

SECT. I.—ADVANTAGES ARISING FROM SPEAKING A FOREIGN LANGUAGE.

THE practice of reading and hearing, the usefulness of which has now been sufficiently unfolded, by familiarising the learner with orthography and pronunciation, will secure his rapid improvement in *speaking* and *writing;* whilst the practice of the latter two branches will enable him to appropriate and retain the materials of language—the words and phraseology,—brought under the cognisance of his mind by the former two. It is more particularly the arts of speaking and writing, that is, the power of *expression*, which really constitutes the *knowledge* of a language; understanding books and men constitutes only a partial *acquaintance* with it.

The art of speaking a foreign language is of the utmost value to a person who visits the country where it is spoken: even the shortest excursion may prove to him a source of infinite profit and pleasure. He is always sure of a good reception: for not only is his society more agreeable, but the natives must feel pleased with the tacit compliment he has paid them by learning their language. Conversational powers secure a welcome in any company, at home or abroad. Those who understand each other are naturally drawn into friendly intercourse: they exchange good feelings and good offices; they entertain mutual regard and attachment, and, thus, the command of a language is productive of the greatest social benefits. But he who cannot communicate his sentiments and thoughts remains an isolated being in the midst of numbers; he is debarred from much social enjoyment and from the happy privilege of contributing his part to the gratification and advantage of his fellow-creatures; he meets with no welcome, with no sympathy; he is, to the full extent of the word, an *alien* in society.

Ambassadors, consuls, and all diplomatic agents who neither understand nor speak the language of the country in which they represent their governments, must often meet with obstacles to the fulfilment of their missions; although it must be admitted that, especially at the courts of Europe, with the exception of the English, French is almost exclusively used as the official vehicle of communication for all the great questions of international interest. Those who are at the mercy of interpreters, may easily become the dupes of the political adversaries with whom they have to contend. It is impossible for any person to render our own thoughts as exactly as we can ourselves. The conferences which are carried on through interpreters have not, in general, the sincerity and expansive intimacy which should exist between the political agents of different nations, in order to facilitate the success of negotiations. A secret between three persons is no longer a secret, especially in diplomacy. They who have filled consular posts in the East, well know that the best means of gaining the confidence of the reserved and suspicious pachas, is to speak their language. Rarely does a Turkish statesman unveil his intimate thoughts to his interlocutor in the presence of another person. It is especially in reference to diplomatic agents that the saying of the Emperor Charles V. finds its application: "A man who speaks four languages is worth four men."

When proficiency has been attained in a foreign language, colloquial intercourse in it, as in the native tongue, becomes a source of great mental culture. It suggests new ideas, and, at the same time, teaches how to use those we have. It checks our self-conceit, by revealing to us our deficiencies; it gives readiness to the memory, fertility to the imagination, and acuteness to the judgment. If reading enriches the mind, conversation polishes it.

In social communion each individual gives utterance to thoughts analogous to his disposition, or to his favourite occupation. If a subject is started, it is viewed and developed in different ways by different persons. Every one contributes to the common stock his share of learning, good sense, taste, or wit; and all gain something. In conversing with those whose good opinion we are ambitious to obtain, the desire of meriting it keeps all the faculties of the mind in a state of excitement, which multiplies the intellectual energies and often leads to the conception of ideas which, in seclusion, would never have been

called forth. In the warmth of conversation, imagination, intent on creating, seldom fails, as it receives a new impulse from emulation, or rather from a pride which recoils from inferiority. We acknowledge, for our own part, that many of what we consider the most useful ideas of this Essay have occurred to us in conversation. Duclos, an eminent French writer, used to converse with his friends on the subjects on which he proposed to write. "With this assistance," he said, "I find in a moment what would have cost me whole days in my closet, and what I, perhaps, should never have found there."

SECT. II.—PRECEDENCE CLAIMED BY SPEAKING OVER WRITING.

If priority in the order of study were regulated only by the degree of facility attendant on the third and fourth branches, *writing* should perhaps precede *speaking;* for, as the learner reads the foreign language more than he hears it spoken, the orthography is sooner familiar to him than the pronunciation. He could unhesitatingly write many words and sentences correctly which he could not pronounce with equal confidence. But, in point of utility, writing a foreign language yields to speaking; and it is consistent with reason to put off to the last what is least required.

In the ordinary circumstances of life we have more frequent occasion to speak than to write. If the power of writing in a foreign language were required, it could only be for epistolary purposes, the national idiom being in every case preferable for any other kind of composition. Even the talent of letter-writing could not always be turned to account: the proficient in a second language has seldom a foreign correspondent, and, in communicating with absent friends, the effusions of the heart flow so much more naturally and rapidly in the native tongue, that he cannot but prefer it; the fear also of not conveying precisely one's own ideas, or of these not being conceived as they are meant, again deters from using any other language.

Conversation is not attended with the same inconvenience; nor is there the same necessity for precision: the misunderstanding that may arise from the errors to which one is liable in speaking a foreign language, can always be immediately explained. It may be ventured upon by the learner earlier than letter-writing, because the oral expression of ideas, being aided

by the natural language of action, requires fewer words and less grammatical knowledge than writing, which is deprived of this auxiliary. The short and alternate interchange of ideas in conversation presents more inducements than the elaborate task of epistolary composition, and affords great facilities for acquiring, by imitation and analogy, the phraseology of the teacher.

In addition to the reasons here adduced for placing exercises in speaking before those in writing, we will observe, that the pupil making his first attempts at speaking in presence of the master, every difficulty is at once removed, every deficiency supplied, and every error corrected; whereas, in the solitary labour of writing, in the intervals of the lessons, he meets with obstacles which he cannot always overcome and loses a great deal of time in the attempt.

We may then, in point of order and importance, give the preference to speaking, of which writing is only the representative; and it is obvious that it can be made more effectually subservient to writing, as is the case in acquiring the national language, than that writing could be made subservient to speaking, as attempted in the ordinary mode of learning a foreign language, in which the writing of exercises takes so prominent a part in the first stages of the study. If a learner succeeds in acquiring the art of speaking, he can scarcely fail to know how to write, at least, letters, which are the sort of composition most required; and he will the better do so as the language of conversation is the best model for epistolary style; besides, the orthography will not present any difficulty, as the knowledge of the word is, in a foreign language, acquired through the visual organ.

SECT. III.—POSTPONEMENT OF WRITING.

The art of writing is greatly facilitated by the practice in the first three branches, and especially reading, which habituates the eye to the spelling and phraseology, furnishes the mind with ideas and the materials of language, forms the taste, and lays the foundation of a good style. Wishing to write in a language before a large stock of words is treasured up, before a familiarity with its orthography and peculiar construction is gained, is wishing to reap before having sown, to know without having learned. A person should carefully notice the words and forms of expression used by the best writers in the language he studies; and

when he has the same or similar ideas to express, he cannot but write correctly, if he employs the same words in the same order. "It is by imitation," says Edmund Burke, "far more than by precept that we learn every thing; and what we learn thus, we acquire not only more effectually, but more pleasantly."* Lancelot, the learned author of the Port-Royal Latin and Greek grammars, recommends the student to postpone the writing of Latin until he is already advanced in the language.†

Writing a foreign language must be deferred until acquaintance with its words and structure enables a learner to dispense with frequent application to the dictionary and grammar. Delay becomes, in this case, the best means of saving time and securing success in the performance. Haste would be most injurious. Reading well written works, studying their contents, and trying to imitate their style, are the ways to improve in the difficult art of writing our own language: how much more indispensable is the study of foreign standard works for writing in the language in which they stand as models. The most eminent writers who have devoted their talents to the cause of education, all those who have proposed improved methods of instruction, agree on this point, however they may differ on others. Milton strongly animadverts on the practice of "forcing the empty wits of children to compose themes, versions, and orations, which are acts of ripest judgment and the final work of a head filled by long reading and observing .... These," he adds, "are not matters to be wrung from poor striplings, like blood out of the nose, or the plucking of untimely fruit. Besides the ill habit which they get of wretched barbarizing against the Latin and Greek idiom, with their untutored anglicisms, odious to be read, yet not to be avoided, without a well continued and judicious conversing among pure authors digested, which they scarce taste."‡ Sir Joshua Reynolds's observation in reference to painting equally applies to composition in writing. "Invention, strictly speaking, is little more than a new combination of those images which have been previously gathered and deposited in the memory: nothing can come of nothing; he who has laid up no material can produce no combination."§

To force upon young people premature attempts at writing, when they are in total ignorance of the foreign language and incapable of writing their own, cannot but create discouragement

* *On the Sublime and Beautiful.*
† *Grammaire Latine de Port-Royal.*
‡ *On Education*, to Sam. Hartlib.
§ *Discourses delivered at the Royal Acad.*

and repugnance. It is contrary to reason to devote so much time and attention to the writing of French or Latin exercises, in prose or verse, when comparatively little exertion is made to acquire the power of composition in the national tongue, in which that talent would find so many opportunities of being turned to account. Parents would find it infinitely more advantageous to their children to have them taught to write their own language with ease, propriety, and elegance, rather than compose French Essays, Latin Hexameters, or Greek Iambics, were they, in doing so, even to equal Voltaire, Virgil, or Homer.

In a foreign living language, writing may be resorted to as an auxiliary to speaking, or when there is an expectation of its being made available at a future period. This double object, however, is not generally aimed at in the study of dead languages; and the exercises required for attaining the fourth branch might perhaps be left out without any prejudice to learners, or any loss to literature. The speaking of bad Latin has been long since discontinued; it would be but consistency to discontinue equally the absurd compositions of classical schools,—"the making of Latin, whereby," says the learned Ascham, "the child commonly learneth, first, an evil choice of words, then a wrong placing of words, and, lastly, an ill-framing of the sentence with a perverse judgment both of words and sentences."* "As to an exercise of thought in such an intellectual buckram," says also Mr. Wyse, "it is a farce. . . . . Plagiarism, barefaced plagiarism, there is no use in concealing it, is the great virtue of your classical composer."† The best Latin productions of the scholars of the present day are indeed mere paraphrases of the ancient models, without a particle of originality, and remarkable only for a confusion of all styles. It is not rare to see introduced in a serious thesis, or academic discourse, the trivialities of Terence, and in a familiar epistle the poetical expressions of Horace, or the oratorical periods of Cicero. Such insignificant, and yet most laboured compositions, exercise neither the taste, imagination, nor judgment; they only give habits of servility in writing.

"I do not think," says Dr. Jerrard, the principal of Bristol College, "that general literature would sensibly suffer, if every Greek and Latin composition that has ever issued from the public schools and universities were thrown into the fire. What should we think of English poems written by Frenchmen or Germans (particularly if their knowledge of English were wholly

* *The Schoolmaster.* † *Education Reform.*

derived from books), with half the sentiments and phrases servilely borrowed from Milton and Shakspeare, and the remainder consisting chiefly of palpable imitations of their turns of thought or expression? Surely we should have to reverse all our ideas of literary excellence, before we could admire such tissues of plagiarisms as these would be, not to mention how quaint, how ludicrous many of the turns on which the authors most piqued themselves, would appear to us. Such, I cannot help thinking, is the general character of the compositions in question."*

But, even admitting that Latin could, at the present day, be written with perfect ease and purity, we do not see how it can be rendered available to any of the various professions in modern society. "In the name of reason," exclaims Dr. G. Gregory, "what has the writing or speaking of Latin to do with the cure of diseases?"† It would be well if English physicians would follow the example of their continental fellow-practitioners, and write their prescriptions in the plain native idiom: they would thus place themselves above quackery, and, by laying aside their mock erudition, would prevent the fatal errors which may arise from their present barbarous and unintelligible jargon, which ought not to be dignified with the name of Latin. We would also suggest that, although the Catholic clergy may, without any prejudice to society, keep up the use of this language in their intercourse among themselves, and in their communications with the Holy See, it would not diminish the weight of their authority, and it would considerably facilitate legal or social transactions, if they always wrote in the national tongue the certificates of baptism, or marriage, which it is within their office to deliver, and which are intended for the inspection of persons who, for the most part, are unacquainted with Latin. It is obvious that we do not allude here to the use made of this language in the religious rites of the Catholic Church. This subject we consider as beyond the province of our investigation.

The practice of writing the dead languages should be indulged in very sparingly in public instruction, the more so as it consumes a considerable portion of time, and thus unreasonably and unprofitably lengthens the period of classical studies. The attention of learners ought to be confined to what is useful in these studies, namely, the reading and analysis of the great writers of antiquity. It is by reflecting on their thoughts and

* *Evidence before Committee of the House of Commons*, 1836.
† *Letters on Literature, Taste, and Composition.*

their style, it is especially by transferring through translation or imitation their beauties into the national idiom, and not by caricaturing them in their own, that classical instruction may be productive of real advantage, that the understanding may be exercised, the taste cultivated, and a command of the native tongue secured.

SECT. IV.—WRITING THE NATIVE AND WRITING A FOREIGN LANGUAGE CONTRASTED.

Composition in the native tongue, independently of its importance as an ultimate object, presents great intellectual advantages which cannot be obtained from writing in a foreign one, at an early stage of the study. The observations which we made in the beginning of this chapter, to show that writing a foreign language yields to speaking in importance, do not apply to the writing of the native tongue, which, considered as a means of mental improvement, excels speaking. It enables us to make a better choice of words, to mark more forcibly the relations between ideas, to connect them more logically, to diffuse more harmony through discourse, and to enter more deeply into the subject of which we have to treat. To speak is to think, but to write is to meditate. The practice of composition in the native language exercises all the powers of the mind more efficiently than conversation, and it is more easily effected than that of extempore speaking; it is a good preparation for either. Cicero,* Quintilian,† and after them, Lord Brougham, observe, that he who wishes to speak well, must write a great deal. "I should lay it down as a rule admitting of no exception," says the latter, "that a man will speak well in proportion as he has written much, and that, with equal talents he will be the finest extempore speaker, when no time for preparing is allowed, who has prepared himself the most sedulously, when he had an opportunity of delivering a premeditated speech. All the exceptions which I have ever heard cited to this principle, are apparent ones only; proving nothing more than that some few men of rare genius have become great speakers without preparation; in nowise showing that, with preparation, they would not have reached a much higher pitch of excellence."‡

* *De Oratore. Lib.* 1. † *Instit. Orat. Lib.* 1.

‡ *Inaugural Discourse at the University of Glasgow*, 1825.

In composing in the vernacular tongue, the writer, intent upon the thought, sometimes compels the words to follow all its movements; at other times, as he polishes the style, he at will corrects, extends, restrains the ideas which engage him. In endeavouring to make them clear and intelligible to others, he considers the words in all their bearings; and, after due investigation, he succeeds in clearly expressing complete and accurate ideas. Hence the truth of Blair's precept that learning to compose and arrange sentences with accuracy and order, is learning to think with accuracy and order.*

This mutual influence and dependence which thought and language have upon each other take place only when the writer uses the language as the direct and spontaneous expression of his thoughts, and when he is practically conversant with its genius and phraseology. But the learner who writes in a foreign language which is not yet familiar to him, does not think in it, and is even unable to choose the words which would best convey his ideas, because he knows not their true import nor the various shades of meaning of which they are susceptible; his consideration of words does not go beyond their orthography, their concord or their respective places, according as he is directed by the rules which he has previously learned or has before his eye,—a purely mechanical process not much above a culinary operation done from a cookery-book.

The act of comparing the expression with the thought which it is intended to convey, of discriminating between different words and different forms, of weighing them, as it were, and judging of the clearness, propriety, and elegance of each, demands great familiarity with a language and an intimate association of the words with the ideas; it cannot, we repeat it, take place in writing exercises or original compositions in a foreign language, when the learner comes at its words only by translation, and is as yet unacquainted with their various acceptations and their idiomatic construction. These premature attempts at writing not permitting him to exercise his imitative or imaginative powers, and fraught with errors, as they must be, are calculated to vitiate rather than improve his taste. It is utterly impossible that they could, as erroneously believed, cultivate his understanding, or impart to him the power of discovering and appreciating the beauties of foreign literary productions.

Considered then, either as an initiatory task, as an intellectual

* *Lectures on Rhetoric and Belles-Lettres.*

exercise, or as a means of better estimating the merit of foreign authors, the practice of writing a foreign language at an early stage of the study is completely useless. But it becomes still more injudicious, when viewed in reference to the learner's improvement in the national tongue. The differences of genius and construction which exist between most languages, and especially between the ancient and the modern idioms, naturally render the frequent practice of writing one an obstacle to writing another correctly. So powerful is the influence of habit, that the more easily and the more frequently we use a foreign language to express our thoughts, the more readily will its peculiar forms intrude themselves on our native composition.

Writing in a foreign language as an introductory exercise not only produces none of the benefits which are usually expected from it, but it is, as an acquisition, very limited in its use. In Latin we have already observed that it cannot be of any service, except perhaps to the Catholic clergy. In the living languages it is not likely to be applied to any thing but epistolary composition, and out of five hundred persons who learn them, not two have occasion through life to keep up a foreign correspondence. In the mother tongue, on the contrary, that acquirement must prove extremely useful in many circumstances, and as its acquisition demands considerable time and application, it is most desirable that young persons should turn their attention to it early, and should prepare for it by an assiduous study of their national works.

If any one feel inclined to write for the public, he will seldom choose, as the vehicle of his ideas, the language of a people among whom he does not live; and if he reside in the country where that language is spoken, instead of being foreign, which it was at first to him, it will, in the course of time, become in reality his own; he may then use it as such, as is the case with the writer of this work, who addresses a British public in a language of which he knew not one word at the age of two-and-twenty.

SECT. V.—ON THE WRITING OF GREEK AND LATIN VERSES.

However prejudicial to classical learning may be the writing of Latin or Greek exercises, that of Latin or Greek verses is incomparably greater. All that has been said against the former applies with double force to the latter, whether considered with

a view to mental discipline, literary discrimination, or international intercourse. As a means of learning ancient prosody, it yields in efficiency and interest to the analysis of the standard poets. As a preparation for reading the Greek and Latin poets, or appreciating their beauties, it is supererogatory; for there is no necessity to write verses in a language in order fully to understand and enjoy its poetry. Many persons read with delight and critical taste their national poets, who have never put two rhymes together. The assertion that Latin verse-making is useful, in "enabling learners to comprehend and feel all the nicer shades of expression, the delicate turn of thought, the curious felicity and harmony of Latin composition," is a gratuitous assumption beyond the power of its assertors to prove. As to its being conducive to the acquisition of a similar accomplishment in the native tongue, as affirmed by some, we will only remark, that, were this object desirable, it is not likely to be attained by this practice: for the mechanism of verse is so different in any two languages, ancient or modern, that a knowledge of the principles of versification in the one could never promote poetical skill in another.

The writing of Greek or Latin verses is more mechanical, uninteresting, tedious, unprofitable, and injurious, than the writing of Greek or Latin prose; it must not, therefore, like prose composition, be simply postponed, it must be rejected altogether from classical instruction, which it contributes to lengthen without any advantage whatever. The practice has been so universally censured that, in support of this opinion, we need only offer a few out of the many observations made on this subject by eminent writers.

"If any one will think poetry a desirable quality in his son, and that the study of it would raise his fancy and parts, he must needs yet confess that, to that end, reading the excellent Greek and Roman poets is of more use than making bad verses of his own, in a language that is not his own. And he whose design it is to excel in English poetry, would not, I guess, think the way to it were to make his first essays in Latin verses." *

"It is not part of our plan to teach versification; for we are of opinion, that the mechanical process of making verses is unfavourable to a proper understanding of prosody, and also to the learning of the language, besides being a great waste of time." †

* J. Locke, *Thoughts on Education.*

† Geo. Long, *Introductory Lecture, University of London* 1830.

"Writing Latin verses is useless in any view; and, in its indiscriminate exercise, it is a great absurdity. That all pupils should be whipped till they produce Latin and Greek verses, is perhaps the most preposterous waste of time and mind, not to say, the grossest injustice that can be conceived."*

"I do not believe that a single real advantage is obtainable from Greek and Latin versification, that cannot be obtained at a far less sacrifice of time and labour without it. . . . . For the very reasons that would make it appear ridiculous to a French and German teacher to require his pupils to compose in French or German verse, and to spend a great deal of their time in endeavouring to acquire a great facility and expertness in so doing, do I protest against the practice of Greek and Latin verse composition. The peculiarities and licenses of the poetry of a language are easily learned in perusing the poets, by those who are acquainted with the style and construction of the prose. With respect to the appreciation of beauties, I do believe that by far the best way of arriving at that end, is by following some such method as I at present adopt. Any passage distinguished for excellence of thought or expression, is committed to memory by the students, its beauties are accurately discussed by the lecturer, and its defects also. Those who have a taste for poetry, are told to turn it into English verse, and they are desired to transfuse as many of the beauties and as much of the spirit of the original as they can into their translation; and, in so far as they fall short of so doing, the deficiency is pointed out by the lecturer. This appears to me to be the most obvious and rational, as well as the shortest, way of enabling them thoroughly to imbibe the spirit and imitate the excellences of the classic poets; and it tends directly to give them what the writing of Greek and Latin verse does not—a greater command over their own language. They become also, in this way, fully acquainted with the resources and powers of the original languages, without taking what I consider an extremely round-about way of arriving at the same end."

"I have been confirmed in my views of the effects of the system of verse-making, by having been informed that in Germany such a practice does not exist, and that the German scholars who take the lead of us in every branch of classical knowledge actually treat with ridicule, and can scarcely believe in the fact, that so much time is devoted to this pursuit at our

* James Simpson, *Evidence before Committee, House of Commons*, 1835.

English schools. Here then the experiment of doing without metrical composition has been tried on a grand scale and with the most decisive results."*

"If it be extremely absurd to exact from children composition in prose in a language of which they are ignorant, and the attainment of which they cannot accomplish through rules, it is not less absurd to force a number of learners to ponder for hours over eight or ten lines, the structure and rhythm of which they do not comprehend. They would certainly derive more profit from writing in their own language a short letter in an easy style and correct spelling, than from the barbarous Latin verses which they make after much fatigue and vexation."†

"The composition of Latin verses usually causes a considerable waste of time to the students. While two or three out of eighty may produce something after much painful labour, all the others torment themselves to no purpose."‡

"A page of Tacitus or Virgil, Demosthenes or Homer, well understood and translated, is, as a means of instruction, far preferable to all those would-be poetical compositions which, in the nineteen-twentieths of learners, are only a work of plagiarism, or of Gradus ad Parnassum."§

"You force a child to express in a language little known ideas not his own! You wish him to write in Latin, even before he can relate in his own language the most ordinary event! You wish him to write Latin verses! Were it French verses, we should understand it, but Latin verses! Will he be the more able to comprehend Horace and Virgil? Will this unpoetical exercise—this mechanical arrangement of words, initiate him into the beauties of poetry? Intellect and taste are said to be requisite for making even passable verses in the native idiom; there does not appear to be any need of such qualifications in Latin! Everybody at school, teachers and pupils, pique themselves on writing Latin verses; and some of these, it is true, are prized by critics; but these critics have not lived in Rome in the Augustan age, and their poetical talent is the more suspicious in Latin, as it is often below mediocrity when exercised in their own language."‖

* J. H. Jerrard, *Evidence before Committee of House of Commons*, 1836.
† N. Pluche, *Mécanique des Langues*.
‡ A. Arnauld, *Mémoire sur le règlement des Etudes*.
§ P. E. Gasc, *Etudes historiques et critiques, sur l'Instruction Secondaire*.
‖ N. S. Morand, *Tribune de l'Enseignement*.

SECT. VI.—OF WRITING IN A FOREIGN LANGUAGE AT AN ADVANCED STAGE OF THE STUDY.

If prose writing in a foreign language be practised when some progress has been made, at least, in the first branch, it will assist in directing more particularly the attention of learners to the form of the words, their concord and arrangement. It will facilitate the prosecution of the learners' private studies, by furnishing them with the means of recording, in the interval of the lessons, the phraseology which they have practised with the professor, of applying to the expression of their own ideas the rules of the language, as they are acquired, or of imitating the style of a standard author, as will subsequently be explained.

Although, at the outset, oral exercises must take the lead, when circumstances permit, those in writing may, in their turn, afford reciprocal assistance to the art of speaking. When the students are advanced in the foreign language, when they are beginning to converse in it, and are able to enter upon the writing of original compositions, this last exercise will be the means of extending the power of expression beyond the limits of conversation, which is but too often carried on by a succession of unconnected propositions.

Composition in a foreign language, which is mostly effected by translating from the native, cannot fail to improve the learner in his own; for, by compelling him to investigate the precise meaning and nature of the native words, in order to render them into their foreign equivalents, it leads him to discriminate between their different acceptations, to ascertain the class to which they belong, or the office they fulfil in each particular instance. The correction of compositions will also afford to the professor frequent opportunities of entering upon considerations of orthography, grammar, and style, for which the rapidity and transiency of the spoken discourse are not favourable.

The practice of writing, if duly deferred, and judiciously conducted until the power of composition is fully attained, will aid in imparting the capability of judging of literary productions; for we can better appreciate the merit of execution in any art when we possess it, and when our own experience has exhibited to us all its difficulties. But, in whatever light this branch is considered, it should follow, not precede, the others; and, although it holds only the last place in the order of study and in

point of practical usefulness, it is obvious that it should not be neglected by those who are ambitious of possessing a complete knowledge of a foreign language and of availing themselves of that knowledge under all circumstances.

Thus it has been shown that these four branches have each a peculiar sphere of usefulness, and that, although distinct in practice, they are connected by the assistance which they lend to each other. Nature and reason combine in justifying the order above prescribed, namely, *Reading leads to hearing, hearing to speaking, and speaking to writing.*

BOOK VI.

OF GRAMMAR.

"Whoever undertakes to teach boys or girls the grammar of a language, undertakes to teach them what they cannot comprehend, and what he perhaps does not understand himself."—A. CLIFFORD.*

"Les règles qu'on a écrites sur les arts produisent à peu près l'effet des télescopes; elles n'aident que ceux qui voient."—D'ALEMBERT.†

"De grammaticis sic sentio: pleraque usu discendæ regulæ deinde addenda ad perfectionem."—LEIBNITZ.‡

CHAPTER I.

UNFITNESS OF GRAMMAR FOR CHILDREN.

SECT. 1.—THE GENERAL ADOPTION OF GRAMMAR AS AN INTRODUCTORY STUDY ACCOUNTED FOR.

HAVING assigned to each of the four branches its place and degree of importance, we will now, before entering on the details of the method which we propose, conclude our general observations on the study of language, by first adverting to the impropriety of making grammar an introduction to it, and, next, examining in what a complete course of grammatical studies consists.

That grammar has been made the preliminary step to the study of Latin, and, by assimilation, to that of other foreign languages, arises chiefly from two injudicious practices which have been noticed before: the one is, the learning of a second

* *Letter to the Earl of Shrewsbury.* † *Encyclopédie. Discours préliminaire.*

‡ "Of grammatical studies this is my opinion: most of the rules should be acquired by practice; they should, afterwards, be added to secure perfection."

language by the comparative process at too early a period, and the other, the premature "making of Latin."

The tender age at which children are usually sent to classical schools, not permitting them to enter at once upon the reading of classic authors, which are above their comprehension, means must be contrived to delay the explanation of them without apparently losing time, and a grammar is consequently put into their hands for one or two years as a preparation. On the other side, the teacher, unable to devote to his pupils all the time which, on account of their youth, they require from him for the explanation of foreign authors, is led to impose on them this tedious and uninteresting task, with the expectation that it will facilitate the work of translation and thus diminish his labour; but the end is defeated by the means; for it is often more troublesome to explain the grammar than the authors themselves.

This preparatory course again serves the purpose of Latin composition, because the unnatural process of writing before having read—that is, of composing in a language of which the learner is ignorant, necessarily demands a previous knowledge of rules as a substitute for the exercises of imitation and analogy. Another reason of the importance given to grammar in the study of a foreign language, is the prevalent belief that a knowledge of it ensures to the learners a knowledge of the vernacular grammar: we will subsequently show the fallacy of this opinion.

While we admit the efficiency of grammar towards the perfect attainment of the arts of speaking and writing, we cannot but object to the early period at which it is usually learned, and to the exaggerated importance attached to it, as an auxiliary to the acquisition of language; for, although it is made to engross the attention of learners, it does not afford them adequate facility towards the attainment of the various objects aimed at in language—nay, these very objects are often lost sight of, in pursuit of this supposed auxiliary. Thus it is that grammar contributes very considerably in lengthening the period of classical instruction.

SECT. II.—GRAMMAR,—AN ART AND A SCIENCE.

Grammar may be viewed in two lights, either as a collection of rules which serve to guide us in the expression of thought, or as an investigation of the principles of language deduced from the nature and relations of the ideas to be represented. In the first light, grammar, applying only to the facts of one language, is called *particular*, and constitutes *an art;* in the second, grammar, proposing to explain the nature of words and their relations by the nature and relations of the things which they represent, and also to account for the mode of using them by a consideration of the mental operations on which it depends, is said to be *general*, because it embraces the principles of all languages; it then constitutes *a science*, being founded on the universal and immutable laws of external nature and of the human mind. There are as many particular grammars as there are languages; whereas, there is only one general grammar, one science of language.

The art of grammar gives the rules for using the materials of one language; the science of grammar gives the rationale of all the facts of language. The art is local,—its rules are established by custom; the science is universal,—its principles are independent of custom. The former is available to those who possess the materials of one language, the latter to those who are acquainted with several idioms: the one, when studied at a proper time, is conducive to the acquisition of a critical knowledge of a language; the other affords no aid in this acquisition, but tends to exercise the higher powers of the mind. Either of these two systems of grammar is an unfit subject of study before the third period of youth: an ignorance of the facts which are the objects of consideration in *particular grammar*, places this art beyond the reach of young children, and the philosophical principles on which *general grammar* rests, unsuited as they are to immature understandings, equally place the grammatical science above their capacity.

Of these two departments of grammar, the art is the one more especially resorted to as an auxiliary to the study of a foreign language, because it is the record, and not the rationale, of the facts which, by exhibiting the usage of a language, has led people to presume that students could thus be made to conform to that usage. With regard to the science of grammar, no one can,

consistently with reason, entertain the opinion that it is capable of affording assistance towards gaining skill in reading or speaking a foreign language; for it is evident that the power of philosophising about language in general, and the power of using one in particular are completely distinct. It is only through a confusion of terms, that the denomination of grammatical science is sometimes given to the theory of particular languages, when considered as auxiliary to their acquisition.

Our observations will, therefore, in this and the following chapter, apply only to the art of grammar, and will particularly refer to the impropriety of beginning the study of a language by its grammatical principles. That this order ought to be reversed appears to us obvious. Those who, in the maturity of reason, have studied a language through its grammar, must have experienced that the definitions and rules of that grammar are, of themselves, often very obscure, and are rendered clear by means only of the expressions which are introduced to illustrate them. But, although it may be said that the remedy of the evil is thus at hand, and that examples assist in understanding grammatical principles, yet the two or three usually subjoined to each rule in particular grammars, are not sufficient to preserve young people from misconceptions. A greater number of illustrations is required, in order to present a rule in all its bearings, and to restrict it within its proper limits. It is, in fact, the phraseology which teaches the rules, not the rules which teach the phraseology. Hence, in a grammar truly consistent with analysis and the inductive principles on which it is based, the examples should precede the rules; the expressions of good writers should stand as primary and essential elements.

This sufficiently shows the way to proceed in learning a foreign language. If, conformably to the dictates of nature, learners are made to enter at once upon the practice of translation, as will subsequently be explained, the forms of that language, being illustrated by numerous expressions, will remain clearly and firmly impressed on their minds; whereas abstract, dry, and uninteresting rules must soon be forgotten. In a word, they should, in the beginning, proceed analytically, not synthetically; they should learn the grammar from the language, not the language from the grammar.

SECT. III.—GRAMMAR UNCERTAIN IN ITS THEORY AND UNINTELLIGIBLE TO CHILDREN.

Can grammar be considered as a safe and intelligible guide for children, when we see so little unanimity of opinion among grammarians themselves? Of the innumerable grammars published in this country for the teaching of English or of foreign languages, not one, perhaps, could be found, which has met with the unconditional recommendation of any one, save its author. Each successive grammatical writer grounds the necessity for publishing his own work on the errors and deficiencies of his predecessors; but we have not seen a production which can really supersede all others; and, as yet, this branch of instruction remains in a deplorable state of imperfection.

The diversity of opinions which exists among grammarians, at once shows the difficulty of the subject, and the absence of all clear and true notions on grammatical theory. How could they agree, when the nature of ideas, which it is the office of language to represent, and the constitution of the mind, which makes these ideas objects of consideration, are not yet well understood? In the whole circle of the arts and sciences there is not one in which the technology, classifications, and doctrines of the writers are more discordant and more uncertain. There are almost as many different names and definitions for the same species of words as there are grammars and grammar-makers. These are at variance with each other on the nature, number, and classification of the parts of speech, on the mode of accounting for elliptical forms and syntactical arrangement, on the generalisation of the principles, and on the number of exceptions. In a word, every branch of the theory of language presents points of dispute, and the most elementary questions have not yet received solutions which place them in the number of universally admitted truths. "Grammarians dispute and the question is still undecided."*

From these conflicting, and often contradictory, notions, it is obvious that many authors of grammar are in error; and if men, with all the advantages arising from reasoning and profound research, have not been able to agree among themselves on the general principles of grammar, how can these be understood by young children? On beholding this perplexity, we cannot help

* "Grammatici certant et adhuc sub judice lis est."—Horace, *Arte Poetica*.

exclaiming with Pluche, "May the child, during his early studies, remain a long time without knowing that there are grammars in the world!"* If young persons were allowed to postpone studying the theory of language until the age of fourteen or fifteen, they would then be better able to understand the subject and would also, by that time, be in possession of forms of speech illustrative of grammatical rules.

Technical terms of grammar, definitions, and rules are unintelligible to a person who is unacquainted with the facts to which they relate, and more unintelligible still, if possible, must they be to children incapable of reflecting on abstract subjects. But the difficulty is again considerably increased by the laconical, figurative, metaphysical, and, we may say, enigmatical language of most grammatical rudiments. The definitions, especially, of the parts of speech are, for the most part, vague, incomplete, and erroneous; because these definitions, belonging to *general* not to *particular* grammar, are, of their nature, somewhat abstruse, and the attempt to simplify them for children only tends to render them more unintelligible and incorrect. Their stability and currency rest chiefly on their precise meaning not being investigated. But what can be expected of books which usually open with a series of absurdities: in defining the letters, or alphabetical characters, which are the elements of the written language, they inform us, some, that a vowel *is*, others, that it *makes*, a sound; Murray's Grammar defines it "an *articulate* sound;" while they all explain the nature of a consonant in a negative way, by declaring that it has no sound of itself; as to what it has, or what it is, they leave us altogether in the dark.

Having just named Lindley Murray, whose work is the grammatical standard in these islands and the model on which most other English grammars are formed, we will add that he is generally very obscure and incorrect. In justification of this remark, we take at random one of his first rules, and examine it as a specimen of grammatical composition. "*To substantives*," he says, "*belong gender, number, and case; and they are all of the third person when spoken of, and of the second when spoken to.*" This inverted and figurative expression is incorrect, both as regards the style and the idea. The second "*and*" is, to say the least of it, extremely awkward. The pronoun "*they*," according to the construction of this sentence, refers to *gender*, *number*, and *case*, which are the subject of the proposition, rather than to

* *Mécanique des Langues.*

"*substantives*," as meant by the author: this is rendered more manifest by placing the words in their natural order, thus, *gender, number, and case belong to substantives; and they are . . .* For the conviction of those who have been taught to take on trust grammatical nonsense, and as a means of removing from their minds a false association of words and ideas arising therefrom, we will adduce a parallel phrase, the sense of which may be caught from the construction, thus, *To kings belong power, fortune, and honours; and they are all of indispensable necessity to royal dignity.* The obvious meaning of the pronoun *they*, in this instance, sufficiently shows the incorrect construction of Murray's sentence. But, if we overlook what he says, and only mind what he means to say, we then encounter another blunder, namely, "*substantives spoken of and spoken to.*" The notion of speaking to substantives is, indeed, very preposterous! Nor is the matter more correct than the manner in which it is expressed: the author seems to wish to establish that substantives may be of the second person, but cannot be of the first. This is a double error; for if substantives can be of the second person, because they are *spoken to* (as he says), there is no reason why they could not equally be of the first person, so as to agree with *I* or *we*, since he states, in some other part of his book, that pronouns always agree in gender, number, and person, with the nouns for which they stand. If, for example, in the phrase, *you, Englishmen, are free*, the substantive, *Englishmen*, is of the second person, it is obvious that it must be of the first in the phrase, *we, Englishmen, are free.* However, the distinction of *first* or *second person* is improperly applied to substantives, because the three persons being intended to mark the different subjects of verbs, and no substantive being ever used as the subject of a verb in the first or second person, it necessarily follows, that substantives do not admit of these persons.

As another example of Murray's extreme inaccuracy and obscurity, let us examine his definition of the next part of speech. He says, "*An adjective is a word added to a substantive to express its quality.*" The word "*added*" is ill-chosen, for it implies *placed after;* and, in English, adjectives are generally *placed before* the substantives; *joined* or *used in connection with*, would, in our opinion, be preferable. Trifling as this error is, it shows that a knowledge of grammar is not sufficient in order to speak or write correctly. "*Its*" is another word liable to objection; for it is doubtful whether it refers to "*adjective*" or to "*substan-*

tive," but, in either case, the assertion is quite wrong: the author must have meant that the adjective expresses the quality of the substance,—that is, of the thing signified by the substantive, not of the substantive itself. Now, in putting even the best construction on this definition, it contains four errors,—1. Adjectives do not express qualities: this is the office of substantives, as *patience, softness* (see Book VII. Chap. I. Sect. VI.)—2. Adjectives are not always joined to substantives, as, *I am becoming wise:* no substantive could be introduced here without altering the sentence.—3. A word may be added to a substantive to express the quality of the thing signified by that substantive, and yet not be an adjective, as *a man of* worth, *a woman's* modesty.—4. There are many adjectives which suggest no idea of quality whatsoever: for example, the numeral adjectives, *first, second,* &c., *colourless, tasteless,* and similar ones signify absence of quality; the adjectives, *all, present, absent, frequent, various, numerous, distant, unexpected,* and many others, attribute no quality to the things signified by the substantives to which these adjectives may be joined.

We shall not weary our reader's patience by extending further these criticisms; but we feel no hesitation in giving, as our opinion, that a large portion of Murray's rules and definitions may be charged with some, if not all, of the defects which disgrace the two expressions above quoted.

A modern writer relates that he once knew a boy who found in his book this definition: "A noun is the name of any thing, as horse, hair, justice," which he misconceived, and read thus, "A noun is the name of any thing, as horse-hair justice." He was of a reflective turn, and long he pondered over the wonderful mysteries of a noun, but in vain; he could not make it out. His father was a justice of the peace; and, one day, the old gentleman was holding a justice's court: there he sat, in state, on an old-fashioned horse-hair seat. A new light now broke in upon our tyro's mind. "My father," said he, mentally, "is a horse-hair justice, and therefore a noun."* To such ridiculous blunders are children exposed by an untimely study of grammar.

"All this profusion of metaphysical definitions and subdivisions," says G. Girard of Fribourg, "is above their capacity and their wants; it is to them only a mass of barbarous terms, which frighten their young imaginations without imparting anything

* *American Annals of Education.*

to their minds."* "There is," says Locke, "more stir a great deal made with grammar than there needs; and those are tormented about it, to whom it does not at all belong; I mean children at the age wherein they are usually perplexed with it in grammar-schools."† "Though grammar," observes also Horne Tooke, "be usually amongst the first things taught, it is always one of the last understood."‡

The celebrated author of "Elements of Criticism," in adverting to this subject, makes the following observations, "In teaching a language, it is the universal practice to begin with grammar and to do every thing by rule. I affirm this to be a most preposterous method. Grammar is contrived for men, not for children . . . . It is a gross deception, that a language cannot be taught without rules . . . . To this day I never think, without shuddering, of Dépautère's grammar, which was my daily persecution during the most important period of life. Curiosity, when I was farther advanced in years, prompted me to look into a book that had given me so much trouble; at this time, I understood the rules perfectly, and was astonished that, formerly, they had been to me words without meaning, which I had been taught to apply mechanically without knowing how or why."§ "Grammar is not learned and never can be learned at school; and the attempt to teach it, the mode of teaching it, and the pretence of teaching a language through it, are insults to the common sense of mankind as to the experience of ages."‖

Grammar, considered abstractedly and previously to a knowledge of the facts on which it rests, as when it is made an introduction to the study of a foreign language, is only a vague and abstruse theory. A child, unprepared by any practical acquaintance with the language, is utterly unable to conceive its metaphysical definitions. He would understand the first book of Euclid much sooner than the first principles of grammar. The elementary notions of geometry are always clear, because they can easily be brought within the power of intuition; they speak to the eye as well as to the mind, but grammatical principles, being purely abstract, are only addressed to his reflective powers. Thus, if we once show to a child an isosceles triangle and an equilateral triangle, and explain to him their respective

* *De l'Enseignement régulier de la Langue Maternelle.*
† *Thoughts on Education.* ‡ *Diversions of Purley.*
§ Lord Kames, *On the Culture of the Heart.*
‖ Westm. Rev., Vol. 4. *Present System of Education.*

properties, little as they differ, he will never take one for the other; but if, for example, we repeat to him a hundred times the definition of an adverb and a conjunction, still the next time he meets a word of either kind, he will hesitate on deciding to which class it belongs. How many persons are there who have learned Murray's Grammar for years, who, in the maturity of reason, would be at a loss to distinguish, in every instance, one of these parts of speech from the other?

A preposition is said to denote a *relation;* but "few people," says Adam Smith, "will find themselves able to express very distinctly what is understood by a relation. . . . . Ask any man of common acuteness, what relation is expressed by the preposition *of;* and, if he has not beforehand employed his thoughts a good deal upon these subjects, you may safely allow him a week to consider of his answer."*

"No abstraction, no metaphysical definitions," says Saint Marc-Girardin, "should enter in the elementary teaching of grammar. On this point I agree, in the wishes I form, with the conclusions of the German Congress held recently at Mayence. There, in that assembly of the masters of the new science (education), it was decided that the irksome and barren labour of studying the abstractions of grammar ought to be spared to children. This instruction should be given in the highest classes, and conjointly with the philosophical instruction with which it is so closely connected. In the elementary classes the learners must be confined to practical exercises; they must be taught grammar from he usage of the language. And, indeed, whatever way it is learned it is by this means alone it is known."†

SECT. IV.—LEARNING GRAMMAR BY ROTE OBJECTED TO.

Many of those who insist on the early study of grammar, having themselves, conformably to the general practice, merely committed it to memory in their childhood, are unable to render its principles perfectly intelligible to young people: they either attempt to explain its metaphysical terms by other metaphysical terms equally obscure, or task their memories with a lesson which should be addressed to their understandings. Children of apathetic disposition are satisfied to repeat unmeaning sounds,

* *Dissertation on the Origin of Language.*

† *De l'Instruction intermédiaire dans le Midi de l'Allemagne.*

and they gladly follow a practice which saves them the trouble of thinking; but is there any thing more disheartening to a child of intellect, than to be obliged constantly to repeat technicalities to which he does not attach ideas? "When I remember," says Lami, "the way in which I was taught, methinks that my head was put in a bag, and that I was made to move on by dint of the whip, being beaten whenever I went crookedly; for, indeed, I could not see any thing. I understood nothing of the rules which I was forced to learn by heart."*

Blind attachment to old practices is not the only reason which keeps up this parroting system. Grammar being, on the one hand, usually commenced at a time when the memory is active and the judgment yet unformed, and being, on the other, generally taught at school, in the lower classes, by persons unacquainted with the philosophy of language, it is found more convenient to give tasks than explanations to children. The verbatim repetition of the text is even sometimes insisted upon, so that, under this implicit injunction to attend to words rather than to sense, they seldom make an effort to comprehend what they learn. This practice is the more absurd, as scarcely any two grammarians could be found who have treated of the same points in the same terms. Learners often recite the definitions and rules with imperturbable correctness; and the instructor, usually taking for granted that lessons so well delivered must be equally well understood, makes no further inquiry: the children, on their part, proud of their performance, although unconscious of the meaning attached to the words they have uttered, take especial care not to ask for explanations, lest they should appear dull of apprehension; or, most probably also, lest they should thus prolong a lesson from which they are anxious to be released; so the system continues. "It is this mode of teaching," says Cobbett, "which is practised in the great schools, that assists very much in making dunces of lords and country squires. They *get their lesson;* that is to say, they repeat the words of it; but as to its *sense* and *meaning*, they seldom have any understanding."†

The paramount object of early education should be the development of all the intellectual powers: but, if the child does not fully understand the grammatical principles which he is desired to learn by heart, he acquires words without ideas; his

* *Entretiens sur les Sciences et sur la Manière d'Enseigner.*

† *Grammar of the English Language.*

memory is exercised to the exclusion of his other faculties, and he forms the pernicious habit of using language devoid of thought. Is it possible that, in the boundless range of information demanding the action of memory, an instructor could not find a subject more useful and more comprehensible to children for the cultivation of that faculty than grammar?

Some advocates for the early learning of grammar, in order to reconcile this practice with the undeniable fact that young children cannot understand it, assert that, as they learn it only for future use, they will understand it when they have occasion to apply it. This specious argument clearly proves, that if these rules are to be made available only at a later period, no inconvenience can arise from postponing the learning of them: "sufficient unto the day is the evil thereof." It may be added, that, if, at the time of being learned, they are not understood, that is, if the memory is not assisted by judgment, they cannot be long retained. So that, in commencing the study of language by that of grammar, the child runs the risk of knowing neither the one nor the other.

Some people, aware that grammar is extremely dry and uninteresting to children, and yet unwilling to depart from the usual practice of making it the preliminary step to the study of language, have resorted to various means of decoying children into a knowledge of it: some have turned it into verse, even set it to music; others have contrived games as means of initiation. Among such contrivances we will mention the burlesque method which was devised for the young Duke of Orleans, the brother of Louis XIV. A great number of little puppets were ranged on a table in battle array, and divided into different troops, under the banners of the parts of speech. In the evolutions of these grammatical soldiers the battalions of adjectives were made to join those of substantives, and these two, closely united, formed the wings of the army. The main body was composed of verbs, which were supported in the rear by their auxiliaries, the adverbs, conjunctions, and others, which formed the corps de reserve. This well-disciplined army, having at its head Dépautère, the great grammarian of that day, advanced in perfect *grammatical* order, and vigorously attacked the solecisms and barbarisms, the avowed enemies of grammar, who, being of course irregular and undisciplined troops, were soon routed and cut to pieces.

Ludicrous as is this mode of acquiring grammar, it is perhaps

less irrational than learning it by heart. It is downright tyranny to impose on children the irksome task of committing to memory these abstract and, to them, unintelligible rules, especially when they are not yet in possession of the means of applying them. The study of grammar must be deferred until after the age of twelve. But, at whatever period it is learned, no time should be wasted in learning it by heart. If it be clearly understood when being studied, the learner will run no risk of forgetting it, provided he read extensively and notice the frequent applications of it which he may meet in his practice.

The true way to arrive at a knowledge of grammar is by illustrating, not by learning its rules. No set of rules committed to memory will either form a profound scholar, or, what is infinitely more important, create habits of patient observation and judgment. A man might be acquainted with the results of many profound inquiries in all the various sciences; he might take them on credit, and act as if he believed them to be true; but his understanding would not be one jot advanced above that of an uninstructed workman. If the knowledge of all facts and the conclusions of all researches could be poured into a man's mind, without labour of his own, he would really be less wise than he who has been properly trained to work the rule of simple proportion. On the other hand, it is not the letter but the spirit of the laws of language which can be productive of benefit. In grammar, as in the sciences and in morals, we can apply a law or reason from a principle only in so far as we have entered into its spirit; the most accurate rule, the wisest precept, if adopted without being perfectly understood in all its bearings, cannot be made to suit all possible circumstances; it will even become a continual source of errors.*

That so few are versed in grammatical science may, in a great measure, be ascribed to the premature study of it, and to its being made a purely mnemonic exercise. Grammar has been rendered so uninteresting to learners in general, that they dispense with it as soon as they can, and preserve through life a sort of aversion to it, which hinders them from resuming its study at a time when it might be of service.

Let us then hope that we shall soon see discarded from every school a method which, as Degérando observes, is in direct opposition to the nature of things, which besets with abstractions the noviciate of a mind yet unprepared for them, and

* See Geo. Long, *Introductory Lecture*. Lond. University.

which preludes the study of a language with the very notions which the knowledge of that language alone can give.*

The unreasonable practice of occupying childhood with so unsuitable studies has met with just censure from many writers and educationists besides those we have named; but as this censure applies also to the use of grammar as an introduction to the study of language, the mention of a few among the most eminent of those who object to it will be more appropriate in the following chapter.

* See *De l'Education des Sourds-muets.*

CHAPTER II.

INSUFFICIENCY OF GRAMMAR AS AN INTRODUCTION TO THE STUDY OF A LANGUAGE.

SECT. I.—PROGRESS OF GRAMMAR AMONG THE ANCIENTS.

To prove how little assistance is given by grammars in acquiring a language, let us examine what was accomplished before their existence.

A language must be long in use and have attained a certain degree of consistency,—it must be spoken and written by men of talent and information, who give it a character of stability, before it can become the object of grammatical inquiry, before its words can be classified, or their syntactical concord and arrangement be generalised—before, in fact, its genius and form can be subjected to a code of laws. Hence we find that, in all languages, grammars have been subsequent to standard literary works; they are formed from great writers, not these by grammars.

Although Hebrew is the most ancient language, yet it was only in the year 1040, A.D., that it was, for the first time, reduced to principles and rules by Rabbi Judah Chiug of Fez.* The grammatical art afforded, consequently, no assistance to Moses in writing the Pentateuch, to David in the composition of his sublime psalms, or to any other of the sacred writers.

Plato, among the Greeks, indulged in grammatical researches, as may be seen in his book "Cratylus;" but Aristotle, his disciple, was the first who analysed language, divided the parts of speech, and laid the foundation of a grammar. To these incomplete essays four books of syntax were afterwards added by Apollonius of Alexandria; and many years elapsed before grammar was publicly taught, for the first time, at Athens, by Epicurus. These were the first grammarians of a people who, long before, had produced almost all the literary master-pieces

* See Vossius, *De Arte Grammat.*, and J. Wilkins, *An Essay towards a Real Character.*

which are still the delight of the learned, and, among others, the works of Homer, Pindar, Euripides, Sophocles, Aristophanes, Thucydides, and Xenophon.

Rome did not, it is true, remain so long without grammatical works; Ennius had early turned his attention to points of grammar; so have, afterwards, Varro and Cicero. Julius Cæsar himself, in the midst of camps, had written a treatise on the analogy of words; but it was only subsequently to the glorious Augustan age, that regular grammars were in use among the Romans, when the Latin language was in its decline. In the study of the Greek, which held in their education the same degree of importance that French does in that of modern nations, they made no use of grammars, but acquired it altogether by reading and conversation. It was only when the young Romans knew Greek practically, as they did their own language, that they were sent to the schools of the grammarians, whose office it then was to perfect their delivery, and explain to them the beauties of the best writers.

Those instructors who, in the time of the Roman republic, assumed the name of grammarians (*grammatici*), were not engaged, as the name seems to imply, in lecturing or writing on what now constitutes grammar: their chief occupation consisted in directing the attention of their pupils to composition, oratorical delivery, and the highest branches of literature. This epithet was afterwards in so great repute among the Greeks and the Romans, that the most illustrious writers took pride in it. It was, in fact, given to those who were eminent in eloquence, history, and philosophy.

SECT. II.—INTRODUCTION OF GRAMMAR IN MODERN EUROPE; SCHOLARS AND WRITERS FORMED WITHOUT ITS AID.

Long after the revival of letters, in the sixteenth century, Dépautère in France, and Lily in England, wrote, in doggrel Latin verse, incomplete essays of Latin grammar. Lily was assisted in the composition of his work by Dean Colet and Erasmus, who, themselves, very sparingly enjoined the use of it in classic learning. This work, now known under the name of the *Eton Latin Grammar*, has undergone some modification, but is still, in many respects, despite the royal recommendation,* a

* In 1545, Henry VIII. published an edict to enforce the use of Lily's Grammar in Schools.

very defective composition. It was some time after, in the reign of Elizabeth, that the practice was first introduced of writing Latin exercises, against which the learned Ascham vehemently declaims; and, about the same period, regular dictionaries made their first appearance. But the system of teaching by grammar and writing exercises by the help of dictionaries, was not prevalent until about the middle of the seventeenth century; and, from that period, it may, without hesitation, be affirmed, that few celebrated practical Latinists have been known in England or in France.

Before the introduction of these supposed aids, Latin was spoken and used actually as a living language by all literary men. Some of the most distinguished among these have declared, that practice in reading the classics and listening to their instructors, were the only means which they had employed to arrive at the extraordinary practical knowledge which they possessed of that language, in which some of them were much better versed than in their own. Justus Lipsius, a profound scholar of the sixteenth century, condemns in the most energetic terms the use of grammars, and laments that he was tormented with them until the age of thirteen. He declares himself indebted for his erudition only to his study of the ancient classics. Jos. Justus Scaliger, another great scholar, who lived about the same time, knew twelve or thirteen languages, for the acquisition of which he declared he had never made use of grammars or dictionaries.

The celebrated classical scholar, Tanaquil Lefebvre, the father and instructor of the still more celebrated Madame Dacier, states in one of his letters, that he had taught his daughter Latin and Greek simply by reading with her the best writers in these two languages. "It is this method," he adds, "which has produced the Budei, the Scaligers, the Turnebi, &c." * In this manner, also, the illustrious Alcuin learned Latin, and taught it to Charlemagne; so was it acquired by Alfred, Henry Beauclerc, Heloisa and Abelard, Roger Bacon, Chaucer, Dante, Petrarch,—in short, by all the scholars of the middle ages; and these have never since been surpassed.

The inadequacy of grammar towards the acquisition of modern languages is equally manifest. At the beginning of this century, before the publication of Murray's Grammar, the one in general use was "Lowth's Introduction." It is but a small volume,

* *Épitre* 13, *à Mme. Sarran.*

which, nevertheless, was considered as fully sufficient for the wants of the English at that time.

Previously to the existence of this work, Dr. Johnson had prefixed to his Dictionary a short grammar, which, by Dr. Lowth's account, comprises the whole syntax in ten lines, and yet made, he observes, no part of the ordinary method of instruction in those days; so that correct speaking and writing were then independent of grammatical studies. Dr. Lowth himself, Shakspeare, Milton, Dryden, Addison, Pope, Young, Thomson, Johnson, Burns, and others, whose works will live as long as the English language, had not, in their childhood, learned any English grammar.

The same has happened in France: Corneille, Molière, Lafontaine, Pascal, Bossuet, Boileau, Racine, whose language was that which prevailed among the well educated class of their days, had written their master-pieces long before the publication of any regular French grammar. The first work which appeared on this subject deserving the name of grammar, was that of "Port-Royal," published towards the close of these celebrated writers' literary career; it, however, treats of the general principles of language, not of those which are peculiar to the French. The few treatises which preceded it were but imperfect dissertations on the elements of language, more curious than useful, and, for the most part, written in Latin. The grammars of Buffier, Girard, Beauzée, Restaut, Wailly, and many others which have subsequently come to light, have not, that we know, enabled later writers to surpass their predecessors.

Bembo was the first who laid grammatical rules for the Italian language two hundred years after Dante, Petrarch, and Boccaccio had given to the world their immortal works.

SECT. III.—GRAMMAR CONSIDERED AS A MEANS OF UNDERSTANDING A FOREIGN LANGUAGE, WHETHER WRITTEN OR SPOKEN.

If we now turn our attention to the learning of a foreign language, which is the subject under immediate consideration, the impropriety of commencing with the study of grammar becomes still more obvious. In this pursuit the student's first care, if the order of study established in the preceding Book be correct, must be to ensure the power of understanding the works written in that language and the persons who speak it; but

grammar cannot give any assistance in these two acquisitions; it does not explain the meaning of words and idioms, which, in fact, is the first, we may even say, the only difficulty in the path of a learner at his entrance into the study of a foreign language, If, for example, he has to translate the French word *fit*, it would be a very circumlocutory and unsatisfactory mode of helping him to tell him, instead of its meaning, that it is the third person singular of the imperfect tense of the subjunctive mood of an active irregular verb of the fourth conjugation. And yet, strange to say, this is the general way people proceed in teaching a foreign language, and especially the Latin: as a preparation for translating it, young persons are kept for a considerable time on grammatical technology, which has little to do with the import of words. In fact, one may know a great deal about the inflections, concord, and government of words—about grammatical technicalities and definitions—and yet be completely in the dark with regard to the true meaning of words and sentences.

Of all those who understand the spoken or the written language, few, extremely few, really know the grammatical distinctions by which words can be characterised. Scarcely one in a thousand could explain what a genitive case or a subjunctive mood is; nevertheless, all people, without exception, would readily apprehend the true signification of a noun or a verb incorporated into a sentence in one of these relations. The expression, *my father's house*, is as clear to an illiterate person as to the most thorough grammarian; and if the former were told that *father's* is in the genitive, or if he could be made to understand the true import of that grammatical denomination, he would not be a whit the wiser as regards the meaning of the phrase *my father's house*.

A person, wishing to read a foreign language, requires only to be told the words of his own equivalent to those of the foreign. It is by translating—that is, associating in his mind the foreign with the corresponding native words—that he can rapidly arrive through the known at the unknown phraseology. However, when the inflections of variable words are numerous, as in the ancient languages, they should be studied conjointly with the practice of reading; but it must be borne in mind that the grammatical distinctions under which these inflections are classified, are, at an early period, only secondary; if dwelt upon, they could but retard the moment of beginning the translation, without in the least facilitating that exercise. Grammatical denominations convey ideas of the particular inflections or

relations of words ; a child learning these denominations is apt to be satisfied with this grammatical distinction, without inquiring into the real sense of the words, although this should be the first object of the study of language. Let him not attend to the technicalities of grammar until the written language is understood, then experience will render them clear, and the study may be prosecuted with ease.

We will, in its place, consider this point more fully ; for the present, we shall only observe, that learning mere words, or the import of their inflections, does not, in our opinion, imply a study of grammar, which more properly consists in definitions, rules, and disquisitions on language. If, however, it is contended that the classification of the various inflections of words (as in declensions and conjugations), independently of the grammatical terms by which these inflections are distinguished,—if it is contended, we say, that such a classification constitutes a part of grammar, so far do we admit the use of grammar as a concurrent study with the first exercises in translation.

The definition of grammar, that it is "*the art of speaking and writing correctly*," is intended to apply to a language already practically known, not to one which is not known ; for it is obvious that the knowledge of the grammar of any language does not impart the power of expression to him who is not in possession of its materials, or, at least, of a large portion of them. There are many learned philologists, thoroughly versed in the grammatical systems of several Eastern languages, for example, who can neither speak, write, nor even read them. But, admitting, for a moment, the correctness of the common definition of grammar, and its applicability to a foreign tongue proposed to be learned, it must be at once conceded that, consistently with this definition, the use of grammar is confined to these two branches—*Speaking* and *Writing*—(and with a view to their attainment alone are all particular grammars written) ; it cannot be of much assistance towards *understanding the language* either of men or books. The latter two-fold acquirement, attainable even by the youngest child and by a person of the meanest capacity, is the result of mere practice and is independent of rules. Thus, in the native tongue, although grammar proves very useful for attaining correctness in *speaking* and *writing*, it is never contemplated as a means of *understanding what is spoken and written*. And since the arts of *reading* and *hearing* are, as we have seen in the preceding Book, the first things to be learned

in a foreign language, it necessarily follows that grammar, affording no assistance in learning these arts, is supererogatory at the entrance upon the study.

Reading the foreign language should be commenced at once, and in a manner similar to the mode of acquiring the native tongue, that is, through a simple explanation of the meaning of words, not through an investigation of their grammatical condition; the learning of declensions, conjugations, and the most useful words being prosecuted at the same time. Radonvilliers dispenses with them altogether: "Children," he says, "learn their own language without hearing of declensions and conjugations. What need is there of them for learning another language? The meaning attached to the termination of Latin nouns and verbs may be learned by practice, as well as that of prepositions and adverbs." * Dumarsais, less exclusive, commences by the explanation of authors, not of rules; but, when his pupils have remarked that the Latin words change in their termination, he shows them how to decline and conjugate. † Lacroix, with Locke and others, inclines to previous acquaintance with the general inflections of substantives and verbs. He says, "The translation from Latin into French is all that is required; it may serve to point out the inversions and particular terms which constitute the genius of a language, and requires little more than an acquaintance with declensions and conjugations. By it the rules of syntax, so abstruse in themselves, so ill explained in most rudiments, become as it were experimental facts, and lose that dryness and futility which have often prevented even children endowed with premature reason from improving in the study of Latin. ‡ Delille's French Grammar is judiciously formed in accordance with these notions: its accidence is written in English, because an acquaintance with verbal inflections may aid a beginner; but the syntax, which affords no aid in learning to read, is given in French, to be studied only after proficiency has been made in this acquirement.

Cobbett is one of the few reflecting men who advocate the use of grammar in beginning the study of a foreign language; but, on this point, his early prejudices got the better of his good sense; and perhaps also his partiality, as an author of grammars, led him to attach more importance to the subject than it possesses as an introductory study. It is not so much

* *De la Manière d'apprendre les Langues.*

† *Exposition d'une Méthode Raisonnée.* ‡ *Essais sur l'Enseignement.*

the science of language which he recommends as the study of his *own works*. However, the advice he gives to learners, that of reading ten times half his French grammar and writing it twice over, as a preparation for translating, is too eccentric to require any serious notice; it may suffice to state that, with a little diligence, one will acquire the power of reading two or three foreign languages before Cobbett's disciples have gone through the ordeal imposed on them as a preparatory step to reading one.*

The observations which we have just made are borne out by the highest authorities; for, since the earliest time to the present, efforts have been made by the most eminent scholars and grammarians themselves to oppose the gradual encroachment of grammar in schools. After the revival of letters, when ancient literature was in a highly flourishing state, teachers were in the habit of explaining the classics to their pupils; but when grammars and dictionaries made their appearance, the indolent and the incompetent among them were glad to avail themselves of books which relieved them from the most laborious part of their duty. We do not mean by this statement to reflect censure on the profession; we have already said that it is not the fault of its present members if a bad system of classical instruction is now prevalent. Teachers must continue to conform to the established usage until a better system is universally and loudly called for. So strong is the prejudice in favour of the course sanctioned by time and enforced by the University routine, that, were heads of classical academies or individual teachers to attempt to reform it, they would probably be exposed to great personal disadvantage. However, many writers have dared to express their opinions: we shall select a few from among them.

Dean Colet, in his address to the masters of St. Paul's school, of which he was the founder, impresses on them the propriety of explaining the classic authors to their pupils in preference to teaching them the grammar. His friends, Cardinal Wolsey and Erasmus, entirely coincided with him in opinion, as may be seen in a letter of the former to the masters of Ipswich school, and in the *Ecclesiastes* and other works of the latter. After them Roger Ascham, whose whole life was devoted to education, protested against grammar being made an elementary study. In alluding to the double translation, of which we shall treat hereafter, he observes; "This is a lively and perfect way of teaching of rules

* See W. Cobbett's *French Grammar*. Let. II.

when the common way used in common schools to read the grammar alone by itself is tedious for the master, hard for the scholar, cold and uncomfortable for them both."* In another place he declares that *grammatica* itself is sooner and surer learned by examples of good authors than by the naked rules of grammarians. "Commence," says Pluche, "the apprenticeship of a language by practice, and afterwards support that practice by the study of grammar: this course, which is that of nature, is both the pleasantest and safest."†

A few detached thoughts from Locke's treatise on Education will show that this great philosopher also deprecated the use of grammar as an introduction to the study of a foreign language. "I would fain," he says, "have any one name to me that tongue that any one can learn, or speak as he should do, by the rules of grammar. . . . The knowledge a gentleman would ordinarily draw for his use out of the Roman and Greek writers, I think he may attain without studying the grammars of those tongues; and by bare reading may come to understand them sufficiently for all his purposes. . . . If grammar ought to be taught at any time, it must be to one that can speak the language already. . . . I know not why any one should waste his time and beat his head about the Latin grammar, who does not intend to be a critic, or make speeches, or write despatches in the Latin language. . . . Nobody is made any thing by hearing of rules or laying them up in his memory; practice must settle the habit of doing without reflecting on the rule."‡

Among the great number of later writers who have equally condemned the use of grammar in beginning the study of a foreign language, we will mention a few whose names are of incontestable authority. Gibbon was led to this opinion in the course of his Greek studies. "I now see clearly," he says, "the advantage of paying little attention to the grammar till you have made some progress in the language."§ "When a boy," observes Vicesimus Knox, "is confined during six or twelve months to the dry rules of a grammar, he is naturally induced to hate the study of a language which presents to him nothing but irksome toil."‖ Condillac, the most eminent among the followers of Locke, says, "It is falling into the grossest error to commence by the rules . . . ." "Nothing," he adds, "is more useless than to

* *The Schoolmaster.* † *Mécanique des Langues.* Liv. II.
‡ *Thoughts on Education*, and *Essay on the Conduct of the Human Mind.*
§ *Extraits raisonnés de mes Lectures.* ‖ *Essays on Liberal Education.*

fatigue a child by loading his memory with the rules of a language which he does not yet understand. Of what use is it to him to know these rules by heart, if he has it not in his power to apply them? I waited then until reading had informed my pupil, and it was so much less misery for him."* Lemare asserts, in his energetic way, "An age of theory, of pure theory, would not make a person advance one step in the knowledge of a language; it would not teach to translate a phrase."† "The grammar of any language whatever," says the Abbé Sicard, "even that of the native tongue, cannot be learned until one knows how to speak it."‡ Captain Basil Hall, who, as a naval man, felt the necessity of learning foreign living languages, declares, from his own experience, that "to commence with grammar in learning a spoken language is perhaps the most complete instance of putting the cart before the horse that is any where to be met with."§

The celebrated author of "Education Reform" also says, "To learn Grammar and Syntax in the end instead of the beginning, is following precisely the course of nature; it is learning the language analytically—learning it, in fine, in the very way in which the language itself has been formed. . . . . What was good in learning the mother tongue is good in learning the classical languages, is good in learning the languages to which they gave rise—the language first, and then the grammar."‖

To these authorities we will add that of a man who has always been remarkable for the acuteness of his discernment and the justness of his observations. Talleyrand says, in his Report on Public Instruction, "The rules of grammar, which are results demonstrated for him who is already acquainted with languages, and who has meditated on them, cannot, in any way, be the means of knowing them for him who is not acquainted with them. They are consequences; we cannot, without doing violence to reason, present them to him as principles."¶

Absurd as is the practice of commencing the study of a language by that of grammar, it is still more absurd to make a child learn grammar through a language of which he is completely ignorant. Pretending to teach what is unknown through the unknown, is one of those anomalies, one of those aberrations of the mind which, by their eccentricities, defy any sort of argu-

* *Cours d' Études. Motif des Études.* † *De la Manière d' apprendre les Langues.*
‡ *Grammaire Générale.* § *Fragments of Voyages and Travels.* 1st Series.
‖ T. Wyse, *Education Reform.* ¶ *Rapport sur l' Instruction Publique.*

mentation. That offspring of the dark ages, the Latin grammar, written in Latin, for children who do not understand Latin, has been long since abandoned by every civilised nation on the continent; it was reserved for the Eton School to exhibit to the world in the nineteenth century a specimen of the obstinacy with which errors are persevered in when sanctioned by time.

SECT. IV.—GRAMMAR CONSIDERED AS AN AUXILIARY TO SPEAKING OR WRITING.

Let us now consider the art of grammar more especially as an auxiliary to *speaking* and *writing*. We have already admitted its usefulness towards acquiring these two branches; but the study of it should be simultaneous with, not previous to, their acquisition: it will be the more profitable as the learner is a greater proficient in reading and hearing. The essential object of grammar is to teach, within certain limits, (as will subsequently be seen), how to use correctly a language already practically known,—not how to speak or write one which is not known. In a foreign language the rules of syntax are as ineffective an introduction to a correct and graceful expression, as the rules of orthoëpy to a pure and pleasing pronunciation. In either, nothing can supply the place of good models.

The art of language being founded on imitation, the capability of practising it must be obtained by a process analogous to that by which all imitative arts are acquired. Although every art is based on scientific principles, and can be reduced to rules, the collection of which constitutes its theory, yet the knowledge of these principles and rules is not the means through which it can be mastered, nor is it the main object of the practitioner. In every art great powers of execution are independent of theory.

We admit that the theory may greatly assist the practice; but it is only at an advanced stage, when the learner is already familiarised with the practical elements of the art; and, even then, it is not absolutely necessary for attaining skill in applying that art; many of those which are now in existence had risen to a high degree of excellence, before science explained the laws by which they were governed. From the epic poems of Homer, composed long before Aristotle wrote on the art of epic poetry, down to the steam-engine, which had exhibited its wonderful

powers on sea and land before scientific treatises explained its mechanism, practice in all the arts preceded theory.

"It is very natural," says Destutt Tracy, "that a highly improved practice should precede any good theory; it cannot be otherwise; for facts can be compared only inasmuch as they are known, and it is from their comparison alone that the general laws which govern them can be discovered. One must have much leisure to attend to the theory; for, if it offers great advantages for the future, it does not provide for the wants of the moment." * This is true particularly of language, which is an art, in the full extent of the word.

"The practice," says Archbishop Whately, "not only may exist independently of the theory, but must have preceded it." † As logic does not enable one to reason, who is not previously endowed with the power of reasoning, so grammar does not teach to speak; it can only assist those who already speak. We can no more learn to speak by the rules of grammar, than we can learn to walk by the laws of equilibrium. It is as irrational to make grammar the starting point in learning to speak or write a language, as it would be to impose on a child the study of perspective and the theory of colours as the preliminary step to learning the art of painting. Language may, in more than one respect, be assimilated to painting. In both, rules are unavailable before having made some progress in the practice; in both, imitation and analogy are the ground-work of improvement. Previously to composing in these two arts, the student should familiarise himself, in the one, with the words and phraseology which express the ideas, and, in the other, with the forms and proportions of the objects which are to be represented. The ear is as intensely engaged in seizing the various shades of sounds in the pronunciation of a language, as the eye in seizing the shades of colouring in a picture. In both, he who wishes to excel must have long confined himself to the imitation of good models, and to the study of the great masters, before he ventures to trust to his judgment and imagination in the execution of original composition.

The causes which have led to the use of words, to their pronunciation, orthography, inflections, and arrangements, are so numerous and so diversified, that extreme irregularity prevails throughout language. If we wish to submit its numberless forms to rules, as an assistance in speaking, these will be so

* *Elémens d'Idéologie.* † *Elements of Logic.*

multiplied, that it will be by far more difficult to retain them all than the whole language itself. Few persons can think of rules when in the act of speaking; attention is then absorbed in the subject of discourse, and the memory is engaged in selecting the words which may suit the ideas. If the speaker is in possession of abundant materials, the thought has been no sooner conceived than its adequate expression is formed by analogy, and the tongue gives it life without the remotest attention to grammatical considerations.

The national language of every country is acquired with extreme facility. Children, at the age of five or six, talk fluently, without having heard of rules, without even dreaming that speech is capable of being decomposed into words and letters. They begin to study the principles of their own language when they are already in possession of the practical part. Many persons, indeed, could be found, who express themselves correctly without having learned grammar at all, and who, if they were told that they speak according to *syntax*, would be as much astonished as Molière's Bourgeois-gentilhomme, who, when informed that he spoke in *prose*, acknowledged that, until then, he had never been aware of it.

Similarly to what happens in the native tongue, an extensive, practical, and correct knowledge of a foreign language may be easily acquired without methodically learning its grammar. We have, in the preceding Book, anticipated the objection that might have been raised against the parallel which we establish between a child acquiring his vernacular tongue and the learner who studies a foreign language, by showing that books are an efficient substitute for people, that reading is as practical an exercise as hearing, for acquiring a language, and that the laws of imitation and analogy may be followed in one case as well as in the other.

It is only when proficiency in reading has been gained, and when speaking and writing are entered upon, that the study of grammar may rationally and profitably be commenced, and that it may become a useful auxiliary to the last two branches: it must then be studied systematically and its rules constantly applied. But, useful as it then is for these objects, it would, of itself, be insufficient for speaking or writing correctly; for its sphere of action in these arts is very limited.

So varied and multiplied are the forms of a language that, however comprehensive a work on grammar may be, it will always leave innumerable expressions without rules for their

construction. The art of grammar adds little to the learner's vocabulary; and yet an extensive stock of words is the most indispensable acquisition for good speaking or good writing; because, without copiousness of language, there is no possibility of suiting expressions to ideas in the diversified circumstances of intellectual communication. It tells neither the pronunciation nor the orthography, which are equally indispensable for speaking or writing correctly. It affords but little assistance in ascertaining the innumerable instances in which languages differ in the application of apparently corresponding words, in the use of prepositions, in the genders and numbers of nouns, the tenses and moods of verbs, in the placing of adverbs, or in the mode of supplying ellipses and the deficiencies of a language. It teaches not the propriety of metaphors, the euphony of vocal arrangement, the idiomatic forms of speech, the various acceptations of words, the different shades of meaning which characterise the terms improperly called synonymous; in fine, none of those niceties of expression which constitute the genius, force, and elegance of a language, and which can be acquired only through an extensive and critical reading of standard works.

Grammar assists so little in freeing the expression of thought from inaccuracy, obscurity, and nonsense, that a composition may be strictly grammatical and, withal, replete with incongruities of all sorts,—bad spelling, inappropriate terms, inelegancies, alliterations, pleonasms, barbarisms, awkward constructions, unsuitable figures, illogical deductions. This truth is forcibly illustrated by those who, in learning a foreign language, have attended to grammatical principles and exercises more than to good models; they often express themselves most incorrectly and ludicrously in that language, although they may not violate a single rule of grammar. They are apt to utter their errors with laughable confidence, and sometimes pertinaciously adhere to them, under the conviction that they speak grammatically. If grammar contributes comparatively so little to perspicuity and accuracy of expression, to elegance and purity of style, to soundness and connection of ideas, is it not absurd to call it, "THE *art of speaking and writing correctly*," and to make it the sole preparation for acquiring these two departments of language?

The common definition of grammar was correct for the ancients, who included under that name all the departments of the arts of speaking and writing, but, confined as it now is to Accidence, which treats of the nature and inflections of words,

and to Syntax, which furnishes rules for their arrangement and concord, it is only one of the many elements of good speaking and good writing. Among the other elements may be mentioned, Lexicography, which records the signification and orthography of words; Etymology, which treats of their composition and derivation; Orthoëpy, which establishes their right pronunciation; Prosody, which teaches the accent and quantity of syllables and the measure of verse; Synonymy, which exhibits the shades of difference between words of apparently similar meaning; Rhetoric, which explains figurative forms and the principles of style; Logic, which shows the relation and dependence of the ideas expressed. A grammar affords no means of mastering these various departments of composition; it cannot, of itself, any more than a dictionary, for example, constitute the art of speaking and writing correctly. If any such art exist, it ought to devolve on all these departments of language collectively, not on one of them exclusively. However, it is impossible to subject completely the expression of ideas to general and fixed laws: custom will always, in defiance of rule and reason, introduce in language innumerable idiomatic and irregular forms, which are nevertheless perfectly correct.

There are few prejudices more universal and more deeply rooted than that of thinking that it is impossible to learn foreign languages at home otherwise than by the rules of grammar. A foreign language ought undoubtedly to be known grammatically; but this does not mean that it should be learned through grammar; it means that it should be spoken and written conformably to the practice of the best speakers and writers. If we reflect that grammarians do not impose laws on language, but only state, within certain limits, what is the common usage among those who speak and write well, it will be obvious that the readiest and most direct way of ascertaining this usage is to frequent the society of well-educated people, and study the best writers. Thus shall we learn from them, as the grammarians themselves have done, what constitutes good speaking and good writing. Custom is the arbiter of language, and, consequently, should be our guide in the acquisition.

When some progress has been made in reading and hearing, a learner may successfully attempt to express ideas, whether in speaking or in writing, by imitating and modifying the phraseology which practice has rendered familiar: such is the course of nature. But as, at the present day, few scholars can converse

freely in the ancient languages, and as those who teach the modern either speak them not, or are not, in most cases, sufficiently in the society of their pupils to afford them frequent opportunity of hearing them, the elements of expression in a foreign idiom must, in general, be gained from reading, and by due attention to the art of composition. Imitation and analogy, the chief instruments by which the native tongue is acquired, being exercised on the phraseology of the foreign authors, will enable the learner to illustrate the rules as he studies them. Nay, more, the very practice of applying the correct phraseology of books to the varied expression of thought will effectually teach the rules in a useful, practical, and permanent manner. This natural mode of proceeding will be unfolded in the Second Part of this work.

The more practical the course is,—that is, the more it is assimilated to that by which the native tongue is acquired,—the less any preparatory study needs be resorted to. At an advanced stage, however, grammar and the other departments of the art of composition will act important parts, and must then be systematically studied; but, we repeat it, accuracy, elegance, and facility of expression depend not so much on learning that art, as on reading assiduously standard works, endeavouring to imitate their style, and associating with those who speak well. Correct language is more effectually acquired from good models than from treatises on the art of writing, as polite manners are more effectually secured from good society than from precepts on good breeding.

SECT. V.—PROFESSED GRAMMARIANS—BAD SPEAKERS AND WRITERS.

Rules often impede imagination and fetter genius. Little minds, incapable of high conceptions, take pleasure in dwelling on the minute elements of language; men endowed with great mental powers and extensive literary attainments, find it difficult to descend to the dry investigation of mere words. The highest aim of the grammarian is the lowest of the orator and the writer. "Where grammar ends," says Campbell, "eloquence begins." *

It is not to the study of grammar, as was shown in Sect I. and II. of this Chapter, that the best writers and the greatest orators are indebted for celebrity. Their commentators, although frequently better grammarians, seldom rise to their standard in

* *Philosophy of Rhetoric.*

literary composition. Dr. Johnson and Dr. Watts have been considered by W. Cobbett as very deficient in grammatical accuracy;* while the latter, the author of several grammars for the learning of different languages, although a forcible political writer—a merit which he owes not to his grammatical knowledge—has left us, in his various works, striking specimens of a very unpolished and inelegant style. Walter Scott had a particular dislike to grammar: although an excellent German scholar, he had learned that language, as he states in one of his prefaces, without resorting to rules. The orthographical incorrectness of his early letters and compositions proves that he had paid equally little attention to English grammar.† Goethe, in his "Autobiography," acknowledges also his neglect of the grammatical art.‡

How few, if any, authors of grammars have been remarkable for their eloquence in public, or their style in literary composition. Lindley Murray, considered in this point of view, occupies, it must be admitted, a very inferior rank in English literature: his work is notorious for inaccuracy of language, inelegance of style, and obscurity of meaning. Dumarsais, a profound French grammarian, the author of the best treatise on tropes, and one of the very few grammatical writers who ever ventured to write on other subjects besides grammar, stands below mediocrity in point of style. Voltaire, who, like all great writers, gained his literary eminence without having devoted much of his time to grammar, warns us against the perusal of most grammars, and, especially, of that of Girard, which is, however, one of the best in the French language. "It would serve," he says, "to corrupt the style of the reader. No one has written in a manner less suitable to his subject." §

Let us, on this point, listen to an eminent philologist, G. Henry. "We men of study," he says, "do not possess those natural graces and truly French turns of expression which are admired in some writings, the authors of which owe less to precepts than to practice. How many excellent grammarians make but sorry poets and pitiful orators when they wish to compose! They bring into their style all the stiffness of meditation, and, bent under the yoke of rules, they have not that independence which indulges in innovations, and bespeaks

* See *Grammar of the English Language.* † J. G. Lockhart, *Life of Walter Scott.*
‡ *Autobiography; Truth and Poetry from my own Life.*
§ *Mélanges Littéraires; Langage.*

genius. Accustomed to weigh syllables, they neglect what has been written by good authors, and minutely examine words, in order to measure them with the compass that marks the narrow circle of their art. They obstinately try to bring our best writers within their confined notions, and do not conceive that a language so rich as ours presents too extensive a field to admit of being restrained by the rules which custom and analogy apply to ordinary expressions. Purity, correctness, and elegance of style are attained by studying, as models, writers who have become classics."

"Grammarians, with their syntax and etymology, teach how to avoid solecisms; but this is not all that is necessary, in order to be able to speak a language such as ours, which presents endless varieties, which it is impossible to reduce to a complete system of precepts. The great masters pass rapidly from the most general rules to the reading of good authors. They keep the best grammars under their hands as books of reference, as faithful guides which prevent their wandering from the right road." *

It may without hesitation be affirmed, that grammar is not the stepping-stone, but the finishing instrument by which we improve and perfect the practical knowledge of a language we already know. The study of it should, therefore, be postponed until some progress has been made in the practice of the four branches.

* *Histoire de la Langue Française.*

CHAPTER III.

COURSE OF GRAMMATICAL STUDIES.

SECT. I.—GRAMMAR TO BE LEARNED BY INDUCTION.

LET it not be inferred from the foregoing remarks that we disregard grammar; we only wish it to be considered as secondary to practice. We object to it, as being unsuited to the capacity of young children and ill calculated as an introduction to the study of a foreign language, that is, as an aid to reading and hearing. We also condemn the practice of forcing it on the memory of learners, instead of addressing it to their reason.

Although grammar does not of itself constitute the art of speaking and writing correctly, it contributes largely to this double object. It is too important a branch of literary instruction to be exposed to the risk of not being understood by our imposing it prematurely on children and on beginners. It must be studied, but studied at a proper season; then it will prove useful to learners; for if practice in the arts precedes theory, theory in its turn improves the arts.

The office of grammar is to determine the relations which the constituent parts of speech bear to each other in significant combinations.* On a knowledge of the combinations rests the power of inferring the relations of the parts. Particular grammar is an inductive art, as general grammar is an inductive science; and in all such arts or sciences we arrive at general principles by inference from facts: the more numerous these are the more easily and the more certainly are the principles ascertained. The student, ambitious to master the grammar of a language, should first diligently collect facts, examine them in all their bearings, and compare them with each other; he may afterwards sum up the result of his investigations. It is only after a careful analysis of facts that we can generalise and classify them.

If, for instance, a number of individual expressions be pre-

* See John Stoddart, *Universal Grammar*, ch. i.

sented, in which the same peculiarity of arrangement prevails, any young person of ordinary capacity will be struck by the resemblance, will readily imitate that peculiarity of arrangement when required to construct other sentences of the same sort, and will easily of himself infer the rule which governs them all. This analytical mode of studying grammar, similar to the intellectual process by which we arrive at a knowledge of the natural laws, is the most rational and the most favourable to mental discipline: it consists in observing facts, comparing them, remarking their resemblances and differences, and afterwards bringing into the same class all similar facts. Those which may be generalised constitute the rules, and those which are not comprised within any class form the exceptions. Thus observation, comparison, and generalisation are the essential means of arriving at the knowledge of a particular grammar. It is by this inductive process that all grammars have been made.

A practical acquaintance with the written and the spoken language, supplying the facts on which particular grammar is founded, is the most rational preparation for learning the arts of speaking and writing. It is by explaining authors that a professor can best teach the mechanism of language to his pupils: the signification, place, and inflections of words, as they are found incorporated in discourse, are the best criterions by which their nature and relations can be known. All the rules of grammar, in fact, are in the written page; it is his office to bring them out. Reading the foreign language cannot, therefore, be commenced too soon. If the student should previously learn the grammar, he would be deprived of this mental exercise in comparison and generalisation. Besides, principles relating to unknown expressions are void of interest, whereas the mind delights in the consideration of principles which account for known facts. The rules which are deduced from observation made in the course of reading on the reiterated occurrence of grammatical facts, procure to the mind the pleasure which usually attends the consciousness of a discovery, and are retained with all the permanency of pleasurable sensations.

Beneficial, however, as it may be for a learner to observe by himself, he should not be refused the instruments which may help him in his observations. It is not enough that, in reading and analysing authors, he should infer the rules of composition by induction from the phraseology; this random way of acquiring the grammatical principles of the language would never give him

a complete and systematic knowledge of them; a methodical treatise on the subject is indispensable, if he wishes to have a comprehensive view of the theory of a language. A few months of assiduous study of a good grammar, after some practice in inferring the rules from the written page, would tend to generalise, connect, and complete the scattered notions of grammar acquired by induction in reading foreign authors.

The grammatical work which is used in aid of induction, and as an auxiliary to the oral instruction of the professor, must be studied with caution; for, in the present state of the science, the definitions and theories of grammars are not always clear or sound. Modern grammarians, having found in the Latin grammar a classification and nomenclature ready made, have adopted them without always examining if the forms of their own language were perfectly similar to those of Latin; and in thus subordinating facts to their systems, instead of subordinating their systems to facts, they have confused all the principles of the grammatical science, and have destroyed the genius of languages.

SECT. II.—STUDY OF THE NATIONAL GRAMMAR.

Particular grammar treats of facts, and arises from the practice of one language; general grammar treats of principles, and arises from a comparison of several languages. Facts being antecedent to principles, the study of the former should precede that of the latter, and the particular grammar of the native tongue should be learned before that of any other.

In favour of this course it may be observed:—1. Signification, not the material form of the words, being the basis of the grammatical system, the study of it must be pursued with more satisfaction in reference to the language the learner knows than to one of which he is ignorant;—2. The relations between words, being dependent on the relations between the ideas which they represent, must necessarily be best understood by him in the idiom which most readily recalls the thought;—3. The practical knowledge which he possesses of the vernacular tongue, furnishing him with a large supply of illustrations, permits him to study its theory with profit;—4. Beginning with the national grammar secures useful information to those whose time of scholastic instruction is limited; whereas by the opposite course,—beginning with the grammar of the foreign tongue,—no available know-

ledge would be gained by a person who had not attained proficiency in that tongue.

A child under the age of twelve may, before entering on a regular study of the national grammar, be initiated into the first elements of grammar, by having his attention directed to the material form of words, to the places which they occupy relatively to each other, and to their various functions in discourse, as was suggested in Book IV. Chap. III. Sect. VI. But, after this age, and when he is familiarised with these elementary notions, the nature of words and the grammatical distinctions concerning them will be best explained to him by a reference to the ideas and to the operations of the mind. In the first case, he distinguishes, for example, an adjective by its admitting *more, less, too*, &c, before it, or *er* and *est* in its termination, by its being placed before a noun, or allowing the substantive *man* or *thing* after it. In the second case, he is made to consider it as a word which attributes property or quality to a subject, or as being a term of comparison; and he is shown that the adjective is always joined to a substantive, or used with reference to one, because the attribute which it represents is essentially united to the substance to which it belongs, and apart from which it has no existence. Definitions are deferred to the last, as being intelligible only to the proficient in language: they are formulas by the aid of which he accounts for what he knows.

From the consideration of words the learner passes to that of their combinations: at first, the grammatical concord and syntactical rules are presented to him as pure conventions; afterwards, he is shown the ideological principles on which these rules are based. But, at any time, he should be made to combine illustrations of the rules by means of native compositions, with the exercise of parsing and the analysis of national standard works: thus, by the combination of practice with theory, the principles will be rendered more clear, and the understanding of the learner will be exercised.

A familiarity with the national grammar will be the best preparation for a similar study in a foreign language, as the learner will find in the grammar of that language nearly the same technical denominations, the same definitions, and the same kind of matter. When once he clearly conceives, in his native expressions, the characteristic differences between the subject and the object, the neuter and the active verb, the indicative and the subjunctive, &c., he will find no difficulty in applying his know-

ledge of these distinctions to the foreign words. The grammar of a second language will be the more easily understood, and that language the more rapidly learned, in proportion as the grammar of the first is better known. "One of the first rules to be observed," says Burnouf, "is never to make a child commence the study of Latin until he knows the principles of his own language."* Rollin equally recommends the study of the national grammar before that of Latin or Greek. "The Romans," he adds, "have taught us, by the attention which they paid to the study of their language, what we ought to do in respect to our own."† "In imitation of the ancients, whom we so justly esteem," says also the Abbé Fleury, "we should study grammar in the native tongue before we study it in another."‡ The national grammar ought, as well as the national history and literature, to form an essential element of national education.

He who speaks his own language badly, or knows not its principles, has but little chance of learning, through its means, how to speak or write another correctly; while a habit of accuracy in the one fosters a similar habit in the other. Under the conviction of this truth, and with a view to lay a proper foundation for the comparative study of foreign languages, we dwelt at some length, in Book IV., on the course of instruction by which an extensive practical knowledge of the native idiom may be gained during the first two periods of youth. It is obvious that an acquaintance with the national grammar is also an indispensable preparation for learning a second language by the comparative method; for it renders more intelligible and profitable the directions and explanations of the teacher, who is often obliged, even at the outset, to resort to technical terms and advert to grammatical distinctions. It assists in translating from the native into the foreign language; because, in order to ascertain what is the foreign expression corresponding to the native, we must previously know what is the nature of the words to be translated. On a clear conception, for example, of the person, tense, and mood of the native verb depends the correctness of the foreign. If the learner has to render into French that part of an English verb which ends in *ed*, he must be able to distinguish, in every case, whether that verb is in the preterite or participle past, since it is differently translated, according as it is one or the other part of the verb. Again, if *but* be the word

* *Petite Grammaire.* † *Traité des Etudes.*

‡ *Traité du Choix et de la Méthode des Etudes.*

to be rendered into French, he must discriminate what part of speech it is in each particular instance, that is, what is its precise import, because, in its triple office of an *adverb*, a *preposition*, and a *conjunction*, it admits of three different translations, viz., *ne que*, *excepté*, and *mais*.

It is true that the learner of a foreign language may, in the course of the study, arrive at a knowledge of these distinctions; but it is thus obtained at the cost of much time, and by dint of repeated blunders, which are a source of much annoyance to the instructor and of discouragement to his pupils. It is, however, chiefly the work of translation, as will subsequently be seen, and not, as often erroneously asserted, the learning of a foreign grammar, including the Latin, which ensures to the classical student a knowledge of his national grammar. When two languages differ much in their genius, the grammar of the one cannot teach the grammar of the other. "Those who say that the Latin grammar teaches English, knowing both grammars, know that they are saying what is not true."* It could not, for example, inform us what article to use in English and when to use it, what preposition is required after a verb and what mood after a conjunction. The definitions alone of grammatical technicalities bear a general resemblance in all languages, and may, then, be tested by reference to Latin grammar; but it is obvious that these definitions can be more clearly illustrated and better understood in the language of the learners than in one of which they are ignorant. Hence it is that the study of the national grammar is a greater assistance to the acquisition of Latin, than that of the Latin grammar is to improvement in the national tongue.

In favour of the contrary opinion, it is frequently said, that Latin is more strictly grammatical than modern languages, and consequently well calculated to initiate a young person into their principles. This hackneyed assertion, which might have passed current before the existence of modern grammar, is far from being satisfactory, as one of very doubtful meaning, if it have any at all. If it signifies that Latin adheres more closely to grammatical rules, it is unfounded; for, in this respect, all languages are on a par with it, which have a recognised system based on fixed usage, as is the case with the principal idioms of Europe and Asia. With regard to exceptions from general rules and to idiomatic forms of expression, they are to be found in Latin as well as in modern languages: Terence and Plautus

* Westm. Rev., Vol. 4. *Present System of Education.*

afford many examples of such irregularities. But, were Latin perfectly regular in its grammatical construction, we do not see how its regularity could facilitate the acquisition of irregular idioms. If, by that assertion, it is meant that Latin is more in accordance with the logical principles of general grammar than other languages—that is to say, that the relations which its words bear to each other are more analogous to the relations between their corresponding ideas, we deny the proposition; for the system of adjuncts or auxiliary words and of juxta-position, which prevails in many modern idioms, seems more conformable to reason and to the nature of the things represented than the system of inflection and transposition which characterises the classical languages. The transpositive collocation of Latin is the order, or rather the disorder suggested by sensation and imagination; the synthetical structure which, in English, and more particularly in French, proceeds from subject to predicate, is the order of judgment and logic.

If the student has not learned the grammar of his own language, previously to his study of a foreign language, he should not neglect to do so from the moment he enters upon that study. At a more advanced stage, he will learn the two grammars conjointly, and by comparison with each other. Comparative and general grammar will then be the more intelligible and the more interesting, as it will confirm previous observation and practice.

To be consistent with nature and reason, the usual order of studies must be changed; the grammar of the foreign language must be transferred from the lower to the higher classes of academical instruction, whilst that of the native should be taught as a foundation for literary studies: thus the lower classes might continue to be denominated *the grammar classes.*

SECT. III.—STUDY OF GENERAL AND COMPARATIVE GRAMMAR.

If general grammar be properly explained to young persons at the time when the mind is capable of such a study, there cannot be a doubt that it will open to them a large field on which they may exercise their reasoning faculties. To classical students, those, especially, who are intended for learned and literary professions, it will prove of the highest importance.

The analysis and comparison of two languages, by exhibiting

the general principles of grammar in contradistinction with those which are peculiar to each language, unfold the genius of both, and lay a foundation for the most interesting researches in philology and mental philosophy. Rising, therefore, above the intellectual facts which constitute the art of grammar, learners should study its definitions, investigate its generalities, and seek in the formation of ideas, and in the operations of the mind, the universal and immutable laws which govern language, and which constitute the science of grammar. This high branch of literature is too much neglected in scholastic instruction. Young people are made to learn the rules of Latin or French grammar, but they are seldom taught the laws which are common to all languages. How many classical teachers could be found who never bestow a thought on this philosophical department of language!

As general grammar is consequent on comparative, and is based on a knowledge of the grammatical system of various languages, learners should always, when engaged in the study of a foreign idiom, be made to compare its principles with those of the vernacular. When they are of an age to dispense with the assistance of a teacher, they should take up different treatises on the subject, read, compare, and judge for themselves. But they should not be satisfied with going through the mere routine of grammars intended to teach the native or a foreign language; for the generality of them are only dry collections of rules without the slightest attempt at accounting for the nature or arrangement of words. They are often obscure and inaccurate; they accumulate facts, and seldom ascend to causes; they are, in fact, mere "grammars of words," as Sicard and Girard call them. "These grammars of words," says the latter, "are the plague of education." * It is a great deception to call such books "scientific," or to think that they can improve the reasoning powers of young persons. Among the few works which are free from this reproach, we may mention the Greek grammars of Buttmann, Matthiæ, and Thiersch, the Latin grammar of Zumpt, and the work of R. G. Latham on "the English Language," which contains much solid learning and valuable criticism in relation both to the history and to the grammar of that language.

In living languages, the standard works on particular and general grammar, looked up to as authorities by the natives, should be thoroughly studied, in order that the structure and

* *De l'Enseignement régulier de la Langue Maternelle.*

genius of the language may be fully understood. French literature, in this respect, presents great resources: it possesses a rich collection of works on grammar, criticism, and philology. The Germans, however, surpass other nations in the depth and extent of their researches in philosophical philology. The ancients afford little assistance in studying the science of grammar, because they neglected the two points on which it rests—the study of languages and the philosophy of the human mind.

Philology must not be confounded with the science of grammar: the former takes its departure from the external phenomena of existing languages, the latter from the internal testimony of consciousness; the one compares languages to investigate their etymology and ascertain historically their origin and progress from a parent stem; the other deduces from different idioms the formation of language in conformity to the laws of the human mind; the one is the history, the other the science, of language. The comparison of various languages with a view to ascertain their lexical and grammatical affinities, and, hence, the filiation and origin of the nations who speak them, constitutes that department of philology which is called Ethnography. It is an auxiliary to the study of history and geography, not of language. Its consideration does not, consequently, come within our limits.

In our recommendation of grammatical studies, we only advert to that comparative investigation of several idioms, which proposes to establish the general laws of grammar. But this highly philosophical pursuit is the portion of those alone who are destined to lead a literary life, and especially to be professors of languages. "A general grammar," says Duclos, "and even particular grammars, can scarcely be of use to any but to masters who already know the languages."* Locke, whom we have already quoted on this subject, does "not see how it can reasonably be made any one's study, but as an introduction to rhetoric."† Condillac, aware that the principles of language have their foundation in the analysis of thought, affirms that "a good grammar must be a good logic." In another place he says, "The art of speaking, the art of writing, the art of reasoning, and the art of thinking, are, after all, but one and the same art."‡ The Abbé Sicard said with him, "Grammar is not simply, as the meaning of the word seems to imply, the art of speaking; it is also logic; it is the art of thinking."§ The

* *Remarques sur la Grammaire Générale de Port-Royal.* † *Thoughts on Education.*
‡ *Logique.* § *Grammaire Générale. Introduction.*

Abbé Fleury, after having expressed as his opinion that foreign languages ought to be learned by practice and not by rules, observes, that "grammar should be studied only after logic."* Destutt Tracy goes farther; he places the study of grammar after that of mental philosophy. "The science of thought," he says, "and that of speech, are intimately connected; they are necessary the one to the other; and it is dangerous to attend to the manner of expressing ideas before having studied the manner in which they are formed in us... Once more, grammar, ideology, and logic are but one and the same thing. I know not any means of separating these three sciences as soon as we once know what they are."†

To advance with certainty in the philosophy of language, the proficient scholar ought to go through a methodical course of grammatical studies in the foreign language, and still more in his own, in which it is an essential part of instruction. Etymology and syntax, logic and rhetoric, punctuation and prosody, should successively engage his attention. The rules elicited in reference to these different subjects should be confirmed by examples drawn from the best writers; and to this effect the thoughts and style of standard works in the two languages should be minutely analysed and compared.

Sect. IV.—ETYMOLOGY AND SYNTAX—GRAMMATICAL ANALYSIS.

Comparative grammar is the groundwork of etymology; and etymology, by a natural re-action, becomes a powerful auxiliary towards the study of foreign languages; because, by exhibiting the derivation and composition of words, it leads from their roots to the comprehension of their compound forms. "It wonderfully simplifies the laborious processes of memory, by embracing a number of otherwise chaotic details under a common law of order."‡

But, although etymology may, in many instances, account for the import of vernacular terms, it does not, in general, make that import clearer to a person already acquainted with it. The signification of words is now often widely different from what it was in the original language; and, on this account, the knowledge of those from which they are derived must frequently be an obstacle to forming a right conception of their present

* *Traité du Choix des Etudes.* † *Elémens d' Idéologie.*
‡ J. S. Blackie, *On the Studying and Teaching of Languages.*

meaning. That words may be fully understood without an acquaintance with their primitives, is proved by those of Saxon origin, which, although their primitives are little known, present as clear and definite meanings to the well educated, as the words of Latin origin do to the classical scholar. The aid which a knowledge of Latin and Greek undeniably affords in understanding scientific words, does not apply to other words in the native tongue; because the signification of these is, in most cases, completely acquired from the daily practice of reading and social intercourse. Were the knowledge of primitive words indispensable for understanding the derivatives, the old Saxon should have a greater claim than Latin or Greek on the attention of the English, since it has supplied their language with more words than those classical idioms have done. We are not aware that the Greeks inquired into the etymology of their native words; and yet their writers and orators well knew the force and value of them (20).

The objection which we have brought against etymology applies only to its inefficiency as a means of ascertaining the modern acceptations of familiar words in the native tongue; in every other respect, it is both useful and interesting. Considered as that department of language which takes cognisance of the changes in the forms of words, etymology is of two sorts, according as it deals with the modifications that words undergo in one and the same idiom, or as it investigates their changes in passing from one language into another.

The first sort, one of the subdivisions of particular grammar, more commonly known under the name of Accidence, is indispensable for the complete knowledge of a language, as it explains the nature of its words and their inflections.

The second sort is an essential part of Philology and Ethnography. This philosophical inquiry, to which has been given the name of Comparative and Historical Etymology, assumes a high position in the scale of human knowledge. If it be made to rest on indubitable facts and philosophical principles, it will be fruitful in rational deductions: by ascending to the primitive meaning of words, it exhibits their relations with things, marks out their proper and their figurative sense, and explains their synonymy; by tracing back the origin of words, it discloses the onomatopœia by which language was formed; by following the successive changes which words have undergone in their signification, pronunciation, and orthography, it shows the influence of

climate, custom, and international relations over language ; by discovering affinities between the words and syntaxes of different languages, it throws light on their filiation, the migration of nations, and the history of man. Etymology, which, in this comprehensive sense, is the history of words through the successive changes of their signification as well as of their forms, exhibits, as it were, their genealogy, and enables us to trace, in the history of various languages which have flourished in different ages, the diversified operations of the mind, and the gradual advancement in civilisation.

However, in the researches to which etymology leads, we must guard against the adoption of any false system. It is sometimes extremely difficult to determine whether a similarity between the words of two languages proves that one is derived from the other, or that they are descended from a common parent. The propensity to imitation which prompted men in every part of the globe to take from nature the first elements of articulate language, must have introduced in various dialects resemblances which ought not to be confounded with derivations. This must have been particularly the case as regards the articulate signs expressive of objects of sense, which have been introduced under similar circumstances of climate and external nature; because they were formed by the imitation of similar things, under the impulse of similar sensations, and by the instrumentality of similar vocal organs. Etymologists should be careful not to ascribe to a filiation of nations what is only the consequence of a natural law of organisation common to all mankind. Words have sprung from so many sources, and undergone so many alterations, that it is not always easy to trace them to their origin. There is no etymology, be it ever so absurd, which may not be apparently justified by examples. However, in ascertaining the relationship between languages, the chances of error will be diminished if equal deference be paid to grammatical as to verbal or lexical affinities.

As an auxiliary to etymological researches, the primary elements both of the spoken and the written language should be carefully investigated ; for there is nothing arbitrary in them. The onomatopœia of language, the source of prosody, the reason of dialectic differences, the secret of the analogies which unite different languages, and the solution of almost all the difficulties which are met with in the inflections of words, are to be found in the articulate sounds in connection with the organs which

form them and with the climate under the influence of which they are produced, as well as in a knowledge of the origin, value, and combinations of the alphabetical characters, and, especially, of the consonants.

As an example of the influence of the vocal organisation over orthography, we may observe that the labial consonants *m* and *b* or *p*, which represent articulations formed, the first, by closing the lips, and the other two by separating them, are, from this natural circumstance, found in every language in this order, *mb*, *mp*. So imperative is this law, that the *n* is often changed into an *m*, in order to conform to this natural succession of articulations; thus, the Latin preposition *in* and the French *en* become *im* and *em* in the compound words, im*bibe*, im*pression*, em*bark*, em*pale*; the French *emporter* (to carry away) is formed of *en* (from it) and *porter* (to carry): the Italian *gran bestia* (great fool), and *con poco* (with little), are usually pronounced *gram bestia*, *com poco*. It is also under the influence of this organic mechanism that the *d* and the *n* of the Latin prepositions *ad* and *in* are made to assimilate with the first letters of the words before which they are placed, as in *ac*cumulate, *af*fix, *ag*gregate, *an*nex, *ap*propriate, *as*sociate, *at*tribute, *il*legal, *il*liberal, *im*material, *im*moveable, *ir*rational, *ir*resolute, &c. The same may be said of every other prefix.

Languages have been formed with more regularity than people are generally prepared to admit: thus the final letters throughout the verbs in the Greek, the Latin, and several modern idioms, act an important part in the expression of thought. Many words can be ranged in distinct classes, according to their initial or final letters. For example, the initial articulation *fl* is imitative of the motion of *fl*uids, or of the *fl*ight of birds, as *flash*, *fleet*, *fling*, &c.; *st* denotes cessation from motion, and, hence, steadiness, as *stop*, *stand*, *still*, &c.: *str* intimates effort, vigour, as *strive*, *strike*, *strength*, &c.; *thr* implies violent motion, as *throw*, *thrust*, *throng*, &c.; *wr*, distortion, as *wry*, *wrong*, *wring*, &c. Numerous derivative terminations, attached to as many different classes of words, mark, in the import of those to which they belong in common, a similar shade of idea, which is easily apprehended, and can be explained by reference to the languages from which they are taken. The following words present, each, an example of a numerous class of terminations derived,—1. from the Saxon, as sing*er*, child*hood*, sad*ness*, partner*ship*, king*dom*, knav*ish*, use*ful*, use*less*, friend*ly*, charm*ing*, trouble*some*, black*en*, &c.;—

2. from the French, as mass*acre*, plum*age*, consul*ate*, mus*ic*, engage*ment*, danger*ous*, ordinar*y*, general*ise*, &c.;—3. from the Latin, directly, or through the French, as act*or*, beau*ty*, protec*tion*, eleg*ance*, prud*ence*, apti*tude*, agricul*ture*, territ*ory*, compre*hensive*, comprehens*ible*, estim*able*, classic*al*, host*ile*, ignor*ant*, expi*ate*, rect*ify*, moral*ise*, &c.;—4. from the Greek, as emble*m*, bas*is*, criter*ion*, botan*ist*, dia*logue*, mir*acle*, &c. Many other examples could be adduced to prove the analogies between sound and sense. The analysis of the primary elements of speech leads to a knowledge of prosody, shows how far language is capable of onomatopœia, and explains the principles of derivation and the composition of words.

Among the various compound forms which it is the office of etymology to analyse, we may mention another class of words which are very numerous in our derived idioms, and, especially, in English. These are the words to which are prefixed Saxon, Latin, and Greek prepositions that modify their import, conformably to the meaning of these prepositions. As examples of such compound words, we may mention, with Saxon prefixes, *fore*runner, *mis*fortune, *over*come, *out*cry, *un*do, *under*stand, *up*land, *with*stand;—with Latin prefixes, *ab*jure, *ad*join, *ante*diluvian, *circum*navigate, *con*voke, *contra*diction, *de*tract, *dis*content, *ex*clude, *extra*ordinary, *in*duce, *in*active, *inter*mix, *intro*duce, *juxta*position, *ob*jection, *per*manence, *post*pone, *pre*fix, *preter*natural, *pro*pose, *sine*cure, *sub*mission, *super*fluous, *trans*port, *ultra*marine;—with Greek prefixes, *amphi*theatre, *ana*gram, *anti*podes, *dia*meter, *epi*demic, *hyper*critical, *hypo*thesis, *para*phrase, *peri*phrase, *sym*pathy.

If etymology embraces all that concerns *words* considered absolutely, and acquaints us with their nature, origin, composition, and inflections, syntax comprises all that relates to *phraseology;* it treats of words relatively to each other; it teaches us their dependency, concord, and order. Etymology and syntax should constitute the two great objects of grammar, since the knowledge of a language consists in a knowledge of its words and phraseology.

This division of grammar gives rise to two distinct departments of orthography—the etymological and the syntactical orthography. The one, invariable, absolute, and apparently arbitrary, which, although founded on derivation, is, for the generality of people, who do not attend to etymological investigations, a mere matter of convention; the material composition of the words and their roots, which comes within its province,

is not, however, the object of ordinary grammar: it is secured, through imitation, by carefully reading and frequently writing them, as also by a reference to a lexicon. The other, variable and relative, depends on grammatical distinctions and mostly falls on the inflections of words; it is acquired by a due attention to the rules of particular grammar.

The careful study of syntax will turn the mind to intellectual investigations: by showing the connection and concord between words, it will open the way for the analysis of thought; and, by pointing out their relative places, it will lead to considering the generation and association of ideas, and, thence, to the highest speculations of mental philosophy.

Grammatical analysis comprises all etymological and syntactical investigations; it ought to derive from them an importance which it cannot have in the way in which it is usually practised. Parsing the language of either a foreign or a national writer should not simply consist, as it usually does, in stating the accidence of words, the class to which they belong, their mutual relation, concord, and government; the learner should also state by what characteristics he ascertains the gender, number, and case of substantives, adjectives, and pronouns, the person, tense, mood, and conjugation of verbs, or other grammatical condition of words, which may be indicated by orthographical distinctions; he should test their functions by accurate definition, and should explain their order, concord, or government, by a reference to the rules of syntax. When skilfully conducted, this exercise will sharpen the youthful mind, throw it back on its own resources, and expand its power of discrimination. However, this elementary analysis, useful and suitable as it may be to junior classes, is insufficient at an advanced stage of the study: if carried no farther, it would fall short of the great ends of intellectual education. Grammatical investigations should rise with the progress of learners.

Parsing should, in the upper classes, consist in indicating the variations which words undergo in their form to express the various modifications of thought; following the gradual changes which time and custom have effected in their pronunciation, orthography, and signification; ascertaining the syntactical place of the different parts of speech; tracing derivatives to their roots; resolving complex terms into their constituent parts; supplying the ellipses of idiomatical forms; showing the influence of the national character over the genius of the language;

accounting for all irregularities, and entering, in short, into the reasons which have led to the use and the place of the words in discourse.

SECT. V.—LOGIC AND PUNCTUATION. LOGICAL ANALYSIS.

Logic may be considered in two points of view, first, as *a science*, when it investigates the formation of ideas and the principles on which reasoning is conducted; secondly, as *an art*, when it furnishes rules to secure the mind from error in its deductions, or, in other words, when it teaches the right use of language for the purpose of reasoning. The science of logic, as a speculative investigation, is a branch of metaphysics which does not belong to our subject. But the art of logic is intimately connected with grammatical studies; it is indispensable as an element of correct language; because it exhibits the relation of ideas, their combination, mutual dependency, and mode of expression; it guides the mind in the path of truth, whether to acquire or to communicate knowledge.

The importance of this study is undeniable; but, at the same time, it must be admitted that common sense is a safer auxiliary in reasoning than all the modes and forms of logic. He who is deficient in this mental quality will not find a substitute in the use of syllogisms. The best school for improving the reasoning powers is the active scene of the world. Many people compare and judge rightly, who never studied the laws of reasoning. Practice is, in this art, as in every other, anterior and superior to theory. In the same manner, therefore, as teachers may best exercise their pupils in grammar, by reading with them foreign or national classics with continual reference to grammatical investigations, so they can best exercise them in logic, by reading some argumentative work and assisting them in analysing it on logical principles.

But logical analysis cannot be prosecuted without carefully attending to punctuation, which, in dividing and subdividing the various propositions of a written composition, marks the different degrees of relation and subordination of its parts. This art deserves more attention than it usually receives. The absence of punctuation in the ancient manuscripts has been a great source of errors among scholars. A comma may considerably affect the sense of a sentence; among many examples of its importance, we may record the ambiguous vote of one of the judges of

Charles I., "Si omnes consentiunt, ego non dissentio," which, by the ingenious introduction of a comma after *non*, reversed the sense and enabled its author to escape death, when Charles II. brought to trial those who had condemned his father.

The analytical signs of punctuation, by decomposing the thought, contribute materially to the clearness of the written discourse: they supply in it the place of the intonations and pauses of the spoken language. They assist elocution; for, by distinguishing incidental from principal propositions, and by marking inversions, they indicate to the reader where the vocal inflections should change. The principles which govern punctuation should therefore be carefully studied; but not, however, until the learner has had some practice in composition, and is capable of understanding the different degrees of subordination which exist between the various members of a complicated sentence.

In the early ages of alphabetical writing, all manuscripts were written in capitals, and not only without any division of phrases into colons and periods, but also without any separation of words, as may be seen in very old inscriptions. The confusion produced by such a mode of writing and the extreme difficulty of reading it may be more easily imagined than described. It, however, so far served the language, that it made authors attend carefully to the just disposition of words, in order that their relations to the rest of the sentence might be obvious.

Aristophanes of Bysantium, 200 years before the Christian era, invented the accentual notation, the breathings and accents, which served the double purpose of marking the tones and the final syllables of words. But punctuation, with perhaps the exception of the full stop, was not introduced until a much later period: it is as yet very arbitrary. The different pauses and intonations which it indicates, constituted, among the Greeks and Romans, one of the chief departments of the study of eloquence, and were explained by their grammarians, whose office it was to teach elocution as well as rhetoric. The absence of punctuation rendered the task of reading so irksome, that the wealthy had readers by profession, as part of their household.

Justus Lipsius, who made learned researches on the origin of punctuation, finds no trace of it before Cassiodorus, who attributes the first introduction of the comma to St. Jerome in the fourth century; the other signs were gradually added. But it was only towards the middle of the fifteenth century, and concur-

rently with the invention of printing, that the system of punctuation, such as it now exists, was definitely fixed upon. Benjamin Franklin suggested a further improvement, by which oral reading might be greatly assisted. This would consist in placing the notes of interrogation and exclamation at the opening of interrogative and exclamatory sentences, as they are in Spanish; for the sense of such sentences rests entirely on the inflections which the voice assumes in commencing them. Our best typographers should take the lead in so desirable an improvement.

Students will find in logic and punctuation the means of prosecuting their investigations in the science of language. The grammatical relation which the words bear to each other is dependent on the corresponding logical relation which exists between the ideas, and which is marked by punctuation. Syntax is explained by logic: all philosophy of language consists in this correspondence between words and ideas.

As grammatical analysis decomposes discourse into its elements —*the words*, so logical analysis decomposes thought into its elements—*the ideas*. These two processes (especially at an advanced stage of the study) should always be combined, as the sign is inseparable from the thought. Passing, then, from grammatical to logical analysis, the language of standard authors must be examined with reference to the ideas. The learners should be made to discriminate between the different acceptations of words, and to investigate the shades of difference which characterise those supposed to be synonymous; the manner and order in which the ideas arise and are associated in the mind should be unfolded; while the principal subjects of propositions are pointed out, as well as the attributes by which they are modified and the incidental sentences which relate to them. In short, the thoughts should be considered in regard to their nature, justness, force, and mutual dependency.

SECT. VI.—RHETORIC AND PROSODY.

Rhetoric should, in its turn, be offered to the attention of students, that they may familiarise themselves with the use of the figures and oratorical ornaments peculiar to different kinds of discourse. It embraces all that relates to precision, harmony, elegance, and elevation of style; all that can refine the taste,

please the imagination, satisfy the judgment, and excite noble and generous sentiments. Its rules are based on the knowledge of the human heart, since they propose to indicate the most certain means of pleasing and persuading men, as those of logic, which propose to convince, are deduced from the laws of the mind. They may be applied to all kinds of composition, written or spoken, even to epistolary style and to conversation; they should not therefore be neglected by the student. A knowledge of rhetoric will also be a good foundation for studying the art of oral reading; because the inflections of the voice and the manner of reading greatly depend on the style of the composition.

In rhetoric, as in grammar or logic, the professor should bear in mind that he will teach the figures of words and of thought with more profit to his pupils by the analysis of standard works explained in class than by any rhetorical treatise. "The reading of good authors," says Rollin, "is one of the most essential parts of rhetoric and the most capable of forming the minds of young persons."*

Prosody, an essential part of oratory and poetry, will exhibit in a systematical way all the peculiarities of sound, emphasis, intonation, accent, and quantity. It will teach what are the words which, by the rapidity or slowness of their utterance, and by the happy combination of their sounds and articulations, can paint in the most imitative manner soft sentiments or rude passions, lively ideas or majestic thoughts, familiar actions of life or sublime scenes of nature. As a knowlege of prosody cannot fail materially to contribute to a pleasing delivery, it ought to enter into a complete course of literary studies. By teaching us the principles on which are founded the euphony and harmony of periods, it will enable us to improve our style in composition as well as our elocution; it will also add to our means of enjoyment in reading eloquent or poetical works. The analogy which the cadences, rhythm, and metre of poetry bear to those of music should be carefully studied by those who wish to have a just perception of the principles of harmony in language and of the mechanism of verse.

The Romans, and above all, the Greeks, brought their prosody to a degree of perfection which has not yet been reached by the moderns, and which offers to classical students the safest standard by which to form their taste. This branch

* *Traité des Etudes.*

of study must not, therefore, be neglected, when the ancient poets are explained or analysed.

The course of grammatical instruction should be completed with the study of standard works on belles lettres, and the literary comments of judicious critics on the most eminent writers. Their beauties and their defects being thus pointed out, the taste of the student will be formed, and his judgment assisted in appreciating the merit of literary compositions. But, to guard against receiving implicitly and indiscriminately all the opinions of professed critics, he should, in the first place, feel and judge for himself in perusing assiduously the great models, and then compare the impressions they make on his mind with the decisions which bear the stamp of authority and established taste.

SECT. VII.—IMPORTANCE OF GRAMMAR VIEWED AS A COMPLEMENTARY STUDY.

If grammar, considered as an introductory study, is, as we have endeavoured to prove, both inefficient and perplexing, it cannot be denied that as a means of mental culture at an advanced stage, it is highly important and interesting. It forms the mind to habits of order and clearness; concurrently with logic and rhetoric, it accustoms learners to accuracy of language, and hence, to accuracy of thinking; by enabling them to account for the correctness of their expressions, it gives them more confidence in speaking and writing; and, by generalising the insulated facts of language, it renders their knowledge of it more extensive and permanent. A thorough grammarian sees analogy where others see only accident; he avoids errors not by blind habit, but by principle. In fact, grammar is the indispensable completion of the study of language; it unites and strengthens its several parts into an harmonious whole; secures its stability, beauty, and symmetry. No one can be said to possess an intelligent, profound, and critical knowledge of a language, unless he has generalised its particulars and ascertained the principles on which they rest.

The grammatical, logical, and rhetorical analysis which has been unfolded in this chapter, will bring into activity all the faculties of the mind; and, although it does not necessarily imply the power of reaching the standard of the great models, it fur-

nishes the student with the means of entering into the secret of composition, of exploring the mysterious laws of creative genius, and of comparing its productions with the rules of composition. Thus he will learn how to follow with success the steps of the great masters, when his turn comes for literary labours. But, should the learner not carry his views so high, still this course of serious studies will not be fruitless: it will enable him to examine literary works more minutely, and will render their perusal more profitable and interesting; it will make him distinguish what constitutes elegance and vulgarity, clearness and obscurity of style, and will thus enable him to discern and appreciate the merit of literary compositions; it will tend to prevent that blind and implicit veneration which too often causes people to confound in their admiration what is good and bad in the style of celebrated writers. Should the rules of literary criticism produce no other result, save to guard against frivolous and false judgments, they would be a valuable acquisition.

This study, however, should not engage the attention to the exclusion of practice; for, without the means of applying the grammatical principles, these would be of very little avail. Let it be well considered that practice alone may lead to grammar, but grammar alone could never lead to practice.

The superiority of practice over theory sufficiently indicates the place which grammar ought to hold in a rational method, and justifies the observations which we have made on this subject. These observations are not altogether new; but, were they even so, they ought not, on that account, to be disregarded; for novelty does not prejudice a truth, nor does antiquity justify an error, or consecrate an absurdity.

Having, in this First Part, laid down the great principles on which rest the teaching and learning of foreign languages, we will, in the Second, expound the method by which this double object may be effectually attained.

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